

Statistics of Hawaii Agriculture  
1999

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# HAWAII AGRICULTURE 1999

## Farm Revenue From Diversified Agriculture Continues At Record Pace

Total farm level revenue rose 3 percent in 1999 to an eight-year high \$528 million, on the strength of pineapple and diversified agriculture. Typically there were both gains and declines among the growing number of diversified crops. Although dry weather and world related price fluctuations resulted in declines for some commodities, there were several bright spots as the diversified sector continued to expand, also rising 3 percent from 1998 to a record \$339 million.

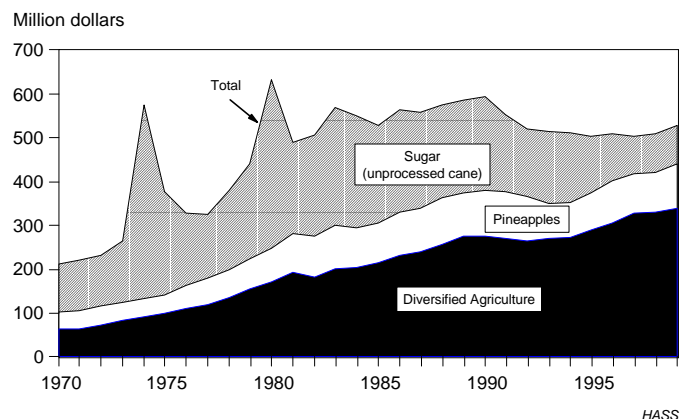
The equivalent farm value of pineapple, the State's leading commodity, rose 9 percent from the previous year, surpassing \$100 million for the first time since 1992, and the fifth highest on record. A boost in production was responsible for the increase, as lower prices tempered the gains.

Although the equivalent farm value of sugarcane declined 1 percent to \$86.8 million, it remained the second leading earner among all agricultural commodities.

Leading the way among diversified commodities were record high gross returns for vegetables and melons, herbs, bananas, flowers and nursery products, seed crop research, aquaculture, and taro. Receipts for fruit crops other than pineapple also rose from the previous year, as papaya production began its recovery from the devastating effects of the papaya ringspot virus experienced during the nineties. Ginger root growers had their second best year ever. Prolonged dry weather adversely impacted, to varying degrees, macadamia nut and coffee production, and the beef cattle industry. World market related price declines were the principal contributor to lower coffee receipts.

Farm level values are an important measure of production agriculture, but they don't truly reflect the total contribution of agriculture to the State and individual county economies. Adding the values of sugar and pineapple processing raises the total to \$617 million for 1999, however, even that is incomplete. Unknown are the value added figures for macadamia nut, coffee, fruit, vegetable, and taro processing, as well as all of the direct and indirect business activity resulting from agriculture. For a more complete picture of agriculture's contribution, refer to "Accounting for the linkages of Agriculture in Hawaii's Business Economy with an input-output Model: A Final Demand-Based Approach" by University of Hawaii Agricultural Economists Khem R. Sharma, PingSun Leung, and Stuart Nakamoto, which was done for 1992.

## Cash Receipts of Agricultural Commodities, State of Hawaii, 1970-99



## Curious Absence of Rain Hampers Farming

Overall weather conditions improved from the previous year, but remained less than favorable in many agricultural areas. While the beginning and ending of the year were marked with unstable weather, most of 1999 was distinguished by the consistent presence of trade winds that produced generally sunny skies and moderate temperatures; conditions that aided the growth of many crops. However, 1999 was also marked by the curious absence of rain showers that are typically associated with the trade winds. As a result, crops that largely depend on natural rainfall did not perform well. This group included orchard crops such as coffee, macadamia nuts, avocados, guavas, and other fruit trees. Pastures were among the most severely affected by the dry weather as they depend on natural rainfall for grass growth and rejuvenation. Deteriorated pastures were a major reason why many cattle ranchers were forced to reduce their herd size. Crops receiving irrigation, on the other hand, were able to take near full advantage of 1999's stable weather conditions. With approximately 90 percent of its acreage subject to irrigation, vegetable farmers fared particularly well. Still, some irrigated farms were adversely affected by the overall dryness as both voluntary and mandatory water conservation measures were implemented during the year. Geographically, the northern islands fared better in 1999 as passing cold fronts provided most areas with adequate precipitation. Southern islands, however, were relatively dry with leeward sections being particularly parched.

### January - April

A shear line passed across the State on New Year's Day generating moderate to heavy showers on Kauai and Oahu. A cold front then dumped some heavy showers on Maui County and portions of Hawaii island on January 8 and 9. While crop progress and fieldwork were hampered by these sometimes heavy showers, losses were relatively light and farmers welcomed the showers after enduring one of the most intense El Niño episodes the previous year. The promise of a wet year, however, quickly faded in February as most rainfall stations reported receiving less than 50 percent of their normal monthly total. Unseasonably strong trade winds in early February also hampered farming activities and crop progress. Trade winds continued to blow throughout March and April. These trades generated occasional showers, heavy at times, in windward areas. Among the wettest spots was the windward side of the Big Island where total rainfall was 36 percent above the mean during the first four months of 1999.

### May - September

Trade winds were light and rainfall was scant as the Hawaiian islands entered its dry period. A Kona storm west of Kauai spawned some heavy shower activity over that island at mid-May. The other islands, however, failed to benefit from the Kona storm and generally remained dry. The windward side of Hawaii island also began to see a reversal of rainfall with Hilo airport reporting only 2.84 inches of rain in May, down 30 percent from the normal amount. This drying out of the normally wet windward side of the

Big Island would continue for the remainder of 1999. As the *Ka'u* or drier season continued into June and July, dry conditions became the norm. There were occasional showers, but in general, conditions remained relatively dry. Voluntary water conservation measures began to pop-up on Maui in late May and on Molokai in June. The Big Island instituted its own water conservation measures in late June. As summer deepened with no significant amount of rain, the water restrictions began to tighten. Maui moved to mandatory restrictions in July and a drought emergency was declared for parts of the Big Island in August.

### October - December

The start of the wet or *Ho'oilo* season was appropriately named as a large Kona storm northwest of the State generated some intense showers for many parts of the State. Rainfall was heaviest on Kauai with four-day totals in the three to seven inch range. The Kona storm hampered crop progress and short-lived flooding was reported, but the storm also provided some much needed rain to previously parched areas. Kauai was subjected to another round of heavy showers in early November when another Kona storm developed close to the island. A relatively dry 1999 ended in December with a variety of unstable weather conditions generating frequent showers. Many stations across the State recorded normal or above normal rainfall during December.

**WEATHER: Precipitation, selected stations, State of Hawaii, 1999**

STATIONS	Year & normal	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	% Annual normal
<b>ISLAND OF HAWAII</b>															
Hilo International Airport	Normal	9.07	12.90	13.69	12.88	10.07	6.61	9.54	10.88	7.44	10.96	13.77	15.76	133.57	
	1999	16.68	19.34	12.13	16.04	2.84	4.66	3.54	10.14	5.65	3.61	7.74	14.41	116.78	87.4
Kamuela (HI86)	Normal	6.60	6.00	7.90	6.90	4.00	2.20	3.70	4.10	2.20	3.30	5.80	7.30	60.00	
	1999	3.50	4.40	10.30	2.20	.50	1.10	2.50	3.00	2.20	2.60	5.50	5.40	43.20	72.0
Kealahou (HI84)	Normal	4.70	3.40	5.60	6.20	7.70	8.20	8.70	8.30	8.20	6.20	4.40	3.40	75.00	
	1999	3.00	.50	2.00	2.80	2.20	4.80	3.70	3.70	4.60	4.20	2.00	1.40	34.90	46.5
Laupahoehoe (HI80)	Normal	13.50	13.20	19.50	18.90	11.70	6.20	10.00	12.40	6.90	9.30	13.60	14.80	150.00	
	1999	16.65	16.36	14.00	--	1.13	3.30	2.52	7.34	4.36	3.04	12.17	16.16	97.03	64.7
Pahala (HI85)	Normal	7.70	6.10	6.30	5.00	3.80	2.20	2.10	3.30	3.40	4.20	5.50	5.40	55.00	
	1999	4.58	5.17	.39	1.39	.61	.20	.04	.06	1.14	3.88	.72	10.21	28.39	51.6
Pahoa (HI83)	Normal	13.90	10.90	14.70	13.90	10.50	7.10	9.80	10.60	9.20	11.50	13.30	14.60	140.00	
	1999	15.70	23.20	13.40	12.60	3.20	3.50	5.00	10.10	9.40	5.20	8.10	16.70	126.10	90.1
<b>ISLAND OF KAUAI</b>															
Anahola (HI48)	Normal	6.80	4.40	6.00	4.60	3.20	1.60	2.50	2.50	2.00	5.10	5.40	5.90	50.00	
	1999	--	1.22	1.11	1.61	5.13	1.41	2.81	--	.90	6.89	1.79	4.03	26.90	53.8
Hanalei (HI45)	Normal	11.30	10.10	14.00	12.70	8.10	5.30	8.60	6.30	4.70	7.00	12.20	9.70	110.00	
	1999	8.92	6.91	6.58	6.56	3.48	4.97	7.99	7.40	3.16	7.09	9.95	11.54	84.55	76.9
Omao (HI51)	Normal	6.90	4.50	5.50	5.20	4.20	3.40	4.70	4.60	3.70	4.70	5.90	6.70	60.00	
	1999	6.00	2.00	3.10	3.80	4.00	3.10	4.10	2.90	2.80	6.30	3.40	6.00	47.50	79.2
<b>ISLAND OF MAUI</b>															
Hana (HI61)	Normal	9.50	6.80	9.50	9.00	6.20	3.80	5.60	5.60	5.40	7.00	8.70	6.10	83.20	
	1999	16.20	10.40	4.20	4.10	1.00	2.60	3.60	2.90	3.00	1.90	1.60	3.50	55.00	66.1
Kula (HI65)	Normal	4.90	3.70	2.80	2.80	2.10	1.10	1.40	1.90	2.00	1.40	2.50	3.40	30.00	
	1999	2.10	1.50	.50	1.90	.90	0	.20	.40	.20	1.30	.10	2.80	11.90	39.7
Wailuku (HI66)	Normal	5.20	3.80	3.60	3.00	1.20	.40	.60	.70	.60	1.70	2.90	4.30	28.00	
	1999	2.57	2.32	1.34	.32	.33	.25	.26	.43	.10	--	--	--	7.92	28.3
<b>ISLAND OF OAHU</b>															
Kahuku (HI09)	Normal	6.30	4.20	5.30	4.00	2.50	1.80	2.20	2.60	2.20	4.00	4.60	5.30	45.00	
	1999	3.10	1.10	2.00	4.60	3.30	1.40	2.70	.90	.50	3.80	1.80	3.60	28.80	64.0
Waialua (HI04)	Normal	5.60	3.90	3.80	2.80	1.70	.90	1.30	.80	1.10	2.70	4.20	5.00	33.80	
	1999	1.77	.74	.96	1.70	3.69	.35	1.33	.56	.40	5.59	1.17	6.78	25.04	74.1
Waianae (HI17)	Normal	3.80	2.30	2.50	1.60	.70	.30	.30	.70	.70	1.80	2.00	3.30	20.00	
	1999	1.90	.30	.20	.10	2.90	.10	0	.20	0	4.10	.10	3.90	13.80	69.0
Waimanalo (HI13)	Normal	8.10	4.90	5.60	4.90	3.10	1.50	1.70	2.00	1.80	4.30	4.90	7.20	50.00	
	1999	4.79	.45	1.53	.54	3.43	.94	1.70	1.16	.70	1.65	.86	7.37	25.12	50.2

-- = Missing data; incomplete.

Source: U. S. Department of Commerce, National Oceanic and Atmospheric Administration. Most rainfall stations were selected from the National Weather Service's hydronet system of automated gages, and those data have not been quality controlled to date, and therefore is not certified by the National Weather Service.

Pages 5 & 6 not included at this time.



# SUMMARIES

## Top 20 commodities, State of Hawaii, 1998-99

Commodity <sup>1</sup>	Rank		Value of production	
	1998	1999	1998	1999
	--- Number ---		--- 1,000 dollars ---	
Pineapples (fresh equivalent)	1	1	92,776	<b>101,448</b>
Sugar (unprocessed cane)	2	2	87,400	<b>86,800</b>
Macadamia nuts	3	3	37,375	<b>37,855</b>
Milk	4	4	33,293	<b>31,223</b>
Seed crops	5	5	25,300	<b>28,000</b>
Coffee	6	6	24,700	<b>21,000</b>
Cattle	7	7	16,861	<b>16,607</b>
Papayas	8	8	12,589	<b>15,929</b>
Eggs	9	9	11,220	<b>10,803</b>
Bananas	11	10	7,350	<b>8,575</b>
Ginger root	12	11	7,200	<b>8,050</b>
Tomatoes	15	12	5,610	<b>7,896</b>
Algae	10	13	8,295	<b>7,883</b>
Anthuriums	13	14	6,301	<b>6,496</b>
Dendrobiums, potted	14	15	6,069	<b>6,194</b>
Hogs	16	16	5,235	<b>5,072</b>
Taro	17	17	3,180	<b>3,604</b>
Dendrobiums, sprays	18	18	2,864	<b>2,676</b>
Cabbage, head	19	19	2,754	<b>2,574</b>
Cucumbers	20	20	2,520	<b>2,494</b>

NA = Not available.

<sup>1</sup> Floriculture categories include only growers with total sales of \$10,000 or more.

## Farm values, State of Hawaii, 1980-99

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Diversified agriculture <sup>1</sup>
	1,000 dollars		
1980	385,100	76,596	172,405
1981	207,500	89,745	192,257
1982	230,800	94,364	182,104
1983	266,900	100,376	201,138
1984	256,200	89,928	204,389
1985	222,400	90,530	215,719
1986	233,800	99,720	231,197
1987	218,000	99,286	240,012
1988	209,900	107,402	256,660
1989	210,300	98,310	276,438
1990	213,800	106,365	275,789
1991	174,900	107,775	268,707
1992	153,700	102,100	264,427
1993	163,000	79,850	271,094
1994	160,100	78,890	273,826
1995	127,700	87,360	288,530
1996	108,100	95,914	306,207
1997	85,500	91,721	327,456
1998	87,400	92,776	329,886
<b>1999</b>	<b>86,800</b>	<b>101,448</b>	<b>339,416</b>

<sup>1</sup> Aquaculture included beginning 1993.

## Diversified agriculture ranked by value, State of Hawaii, 1998-99

Commodity	Rank		Value of production			Percent of diversified agriculture	
	1998	1999	1998	1999	Year-to-year percent change	1998	1999
	--- Number ---		----- 1,000 dollars -----		----- Percent -----		
Flowers and nursery products	1	1	73,207	<b>75,363</b>	<b>+3</b>	22.2	<b>22.2</b>
Vegetables and melons <sup>1</sup>	2	2	51,149	<b>56,438</b>	<b>+10</b>	15.5	<b>16.6</b>
Macadamia nuts	3	3	37,375	<b>37,855</b>	<b>+1</b>	11.3	<b>11.2</b>
Milk	4	4	33,293	<b>31,223</b>	<b>-6</b>	10.1	<b>9.2</b>
Fruits (excluding pineapples)	7	5	24,530	<b>28,216</b>	<b>+15</b>	7.4	<b>8.3</b>
Seed crops	5	6	25,300	<b>28,000</b>	<b>+11</b>	7.7	<b>8.2</b>
Coffee	6	7	24,700	<b>21,000</b>	<b>-15</b>	7.5	<b>6.2</b>
Aquaculture	9	8	16,620	<b>18,102</b>	<b>+9</b>	5.0	<b>5.3</b>
Cattle	8	9	16,861	<b>16,607</b>	<b>-2</b>	5.1	<b>4.9</b>
Eggs	10	10	11,220	<b>10,803</b>	<b>-4</b>	3.4	<b>3.2</b>
Hogs	11	11	5,235	<b>5,072</b>	<b>-3</b>	1.6	<b>1.5</b>
Other livestock and crops			10,396	<b>10,737</b>	<b>+3</b>	3.2	<b>3.2</b>
Total			329,886	<b>339,416</b>	<b>+3</b>	100.0	<b>100.0</b>

<sup>1</sup> Includes ginger root and herbs.



## SUMMARY: Acreage in crop and total farm acreage, by counties, 1995-99

Year	Sugarcane	Pineapples <sup>1</sup>	Vegetables and melons <sup>2 3</sup>	Fruits (excluding pineapples)	Coffee	Macadamia nuts	All other crops <sup>4</sup>	Total farm acreage <sup>5</sup>
<i>1,000 acres</i>								
<b>State <sup>6</sup></b>								
1995	83.8	19.9	6.0	7.0	6.8	20.3	6.5	1,470
1996	68.8	20.0	6.2	7.1	6.6	20.2	8.4	1,440
1997	68.7	19.9	6.5	8.0	7.0	20.2	13.3	1,440
1998	67.6	21.0	6.6	7.6	7.4	20.2	15.9	1,440
<b>1999</b>	<b>67.0</b>	<b>21.0</b>	<b>8.2</b>	<b>8.1</b>	<b>7.7</b>	<b>19.9</b>	<b>16.2</b>	<b>1,440</b>
<b>Counties:</b>								
<b>Hawaii</b>								
1995	2.4	*	2.0	5.5	1.9	<sup>7</sup>	2.1	890
1996	0	*	2.1	5.3	2.2	<sup>7</sup>	1.7	870
1997	0	*	2.1	5.6	2.5	<sup>7</sup>	1.7	870
1998	0	*	2.1	4.8	2.8	<sup>7</sup>	2.0	870
<b>1999</b>	<b>0</b>	<b>*</b>	<b>2.3</b>	<b>4.9</b>	<b>3.2</b>	<sup>7</sup>	<b>2.3</b>	<b>870</b>
<b>Honolulu</b>								
1995	8.0	10.4	1.9	.5		<sup>7</sup>	.8	85
1996	0	10.7	2.5	.8	<sup>7</sup>	<sup>7</sup>	4.0	80
1997	0	10.8	2.9	1.3	<sup>7</sup>	<sup>7</sup>	8.3	80
1998	0	11.4	2.8	1.6	<sup>7</sup>	<sup>7</sup>	11.0	80
<b>1999</b>	<b>0</b>	<b>11.9</b>	<b>4.3</b>	<b>1.9</b>	<sup>7</sup>	<sup>7</sup>	<b>10.9</b>	<b>80</b>
<b>Kauai</b>								
1995	30.8	*	.1	.8	<sup>7</sup>	<sup>7</sup>	1.4	200
1996	26.5	*	.1	.8	<sup>7</sup>	<sup>7</sup>	1.3	200
1997	25.6	*	.1	.8	<sup>7</sup>	<sup>7</sup>	1.6	200
1998	24.7	*	.1	.9	<sup>7</sup>	<sup>7</sup>	1.0	200
<b>1999</b>	<b>23.7</b>	<b>*</b>	<b>.2</b>	<b>1.0</b>	<sup>7</sup>	<sup>7</sup>	<b>1.1</b>	<b>200</b>
<b>Maui</b>								
1995	42.6	9.5	2.0	.2	<sup>7</sup>	<sup>7</sup>	2.2	295
1996	42.3	9.3	1.5	.2	<sup>7</sup>	<sup>7</sup>	1.4	290
1997	43.1	9.1	1.4	.3	<sup>7</sup>	<sup>7</sup>	1.7	290
1998	42.9	9.6	1.6	.3	<sup>7</sup>	<sup>7</sup>	1.9	290
<b>1999</b>	<b>43.3</b>	<b>9.1</b>	<b>1.4</b>	<b>.3</b>	<sup>7</sup>	<sup>7</sup>	<b>1.9</b>	<b>290</b>

\* = Less than 50 acres.

<sup>1</sup> Land used for pineapple.

<sup>2</sup> Harvested acreage.

<sup>3</sup> Includes ginger root.

<sup>4</sup> Includes taro, seed corn, feed and forage crops (excluding pineapple feed products), flowers, foliage and nursery products.

<sup>5</sup> Includes land not in crop and pasture such as farm house lots, roads, woodlots, etc.

<sup>6</sup> Sum of county estimates may not add to State total due to rounding.

<sup>7</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

# SUMMARIES

## SUMMARY: Number of crop farms, by counties, 1995-99

Year	Sugarcane	Pineapples <sup>1</sup>	Vegetables and melons	Fruits (excluding pineapples)	Coffee	Macadamia nuts	Taro	Flowers and nursery products
<b>State</b>								
1995	9	15	690	924	580	700	190	705
1996	7	20	950	1,040	560	750	180	690
1997	4	15	1,000	1,043	585	800	160	670
1998	4	15	880	1,515	610	800	180	745
<b>1999</b>	<b>4</b>	<b>15</b>	<b>1,020</b>	<b>1,373</b>	<b>650</b>	<b>800</b>	<b>190</b>	<b>855</b>
<b>Counties:</b>								
<b>Hawaii</b>								
1995	1	7	335	652	570	<sup>2</sup>	109	333
1996	1	8	400	720	550	<sup>2</sup>	100	316
1997	0	6	440	704	575	<sup>2</sup>	85	312
1998	0	5	432	912	600	<sup>2</sup>	100	355
<b>1999</b>	<b>0</b>	<b>5</b>	<b>600</b>	<b>805</b>	<b>635</b>	<sup>2</sup>	<b>100</b>	<b>376</b>
<b>Honolulu</b>								
1995	2	2	235	128		<sup>2</sup>	9	220
1996	1	2	395	135	<sup>2</sup>	<sup>2</sup>	4	211
1997	0	2	400	129	<sup>2</sup>	<sup>2</sup>	10	202
1998	0	2	280	186	<sup>2</sup>	<sup>2</sup>	11	205
<b>1999</b>	<b>0</b>	<b>2</b>	<b>230</b>	<b>174</b>	<sup>2</sup>	<sup>2</sup>	<b>12</b>	<b>245</b>
<b>Kauai</b>								
1995	4	3	25	70	<sup>2</sup>	<sup>2</sup>	52	46
1996	3	4	50	100	<sup>2</sup>	<sup>2</sup>	54	52
1997	2	3	55	124	<sup>2</sup>	<sup>2</sup>	50	50
1998	2	3	54	155	<sup>2</sup>	<sup>2</sup>	55	40
<b>1999</b>	<b>2</b>	<b>3</b>	<b>45</b>	<b>143</b>	<sup>2</sup>	<sup>2</sup>	<b>65</b>	<b>80</b>
<b>Maui</b>								
1995	2	3	95	74	<sup>2</sup>	<sup>2</sup>	20	106
1996	2	6	105	85	<sup>2</sup>	<sup>2</sup>	22	111
1997	2	4	105	86	<sup>2</sup>	<sup>2</sup>	15	106
1998	2	5	114	262	<sup>2</sup>	<sup>2</sup>	14	145
<b>1999</b>	<b>2</b>	<b>5</b>	<b>145</b>	<b>251</b>	<sup>2</sup>	<sup>2</sup>	<b>13</b>	<b>154</b>

<sup>1</sup> Includes specialty pineapple.

<sup>2</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

# SUMMARIES

## SUMMARY: Number of livestock operations and total number of farms, by counties, 1995-99

Year	Cattle <sup>1</sup>	Hogs	Milk	Eggs	Honey	Total (non-duplicated) <sup>2</sup>
<b>State</b>						
1995	850	300	60	55	20	5,300
1996	850	250	60	55	25	5,400
1997	830	250	50	55	23	5,500
1998	830	250	50	55	29	5,500
<b>1999</b>	<b>800</b>	<b>230</b>	<b>50</b>	<b>55</b>	<b>28</b>	<b>5,500</b>
<b>Counties:</b>						
<b>Hawaii</b>						
1995	460	70	30	25	14	3,150
1996	470	80	30	25	16	3,250
1997	480	90	27	25	14	3,300
1998	480	80	27	26	18	3,300
<b>1999</b>	<b>470</b>	<b>70</b>	<b>28</b>	<b>28</b>	<b>14</b>	<b>3,300</b>
<b>Honolulu</b>						
1995	60	120	15	19	<sup>3</sup> 6	900
1996	60	70	15	19	<sup>3</sup> 9	900
1997	50	70	10	19	<sup>3</sup> 9	900
1998	50	80	10	17	<sup>3</sup> 11	900
<b>1999</b>	<b>60</b>	<b>70</b>	<b>10</b>	<b>15</b>	<b><sup>3</sup> 14</b>	<b>900</b>
<b>Kauai</b>						
1995	140	50	10	4	<sup>3</sup> 6	450
1996	130	40	10	4	<sup>3</sup> 9	450
1997	120	30	8	4	<sup>3</sup> 9	500
1998	120	40	8	4	<sup>3</sup> 11	500
<b>1999</b>	<b>100</b>	<b>30</b>	<b>8</b>	<b>4</b>	<b><sup>3</sup> 14</b>	<b>500</b>
<b>Maui</b>						
1995	190	60	5	7	<sup>3</sup> 3	800
1996	190	60	5	7	<sup>3</sup> 3	800
1997	180	60	5	7	<sup>3</sup> 3	800
1998	180	50	5	8	<sup>3</sup> 3	800
<b>1999</b>	<b>170</b>	<b>60</b>	<b>4</b>	<b>8</b>	<b><sup>3</sup> 3</b>	<b>800</b>

<sup>1</sup> Includes beef, dairy, and dairy replacement operations.

<sup>2</sup> Based on farm definition of \$1,000 or more of agricultural sales.

<sup>3</sup> Honolulu and Maui combined with Kauai to avoid disclosure of individual operations.

# SUMMARIES

## SUMMARY: Value of crop sales, by counties, 1995-99

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Vegetables, ginger root, herbs, and melons	Fruits (excluding pineapples)	Coffee (parchment)
<i>1,000 dollars</i>					
<b>State</b>					
1995	127,700	87,360	38,604	28,218	16,200
1996	108,100	95,914	40,672	26,521	20,800
1997	85,500	91,721	44,626	29,564	28,200
1998	87,400	92,776	51,149	24,530	24,700
<b>1999</b>	<b>86,800</b>	<b>101,448</b>	<b>56,438</b>	<b>28,216</b>	<b>21,000</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	12,200	*	14,267	22,255	11,500
1996	1,700	*	16,140	20,646	10,810
1997	0	*	17,585	21,018	16,245
1998	0	*	16,249	14,672	16,100
<b>1999</b>	<b>0</b>	<b>*</b>	<b>18,569</b>	<b>15,547</b>	<b>9,300</b>
<b>Honolulu</b>					
1995	21,000	62,585	10,283	2,353	3
1996	10,400	68,770	12,554	2,640	3
1997	0	63,426	14,499	4,814	3
1998	0	64,363	22,098	6,487	3
<b>1999</b>	<b>0</b>	<b>73,123</b>	<b>27,419</b>	<b>8,535</b>	<b>3</b>
<b>Kauai</b>					
1995	35,100	*	294	2,579	3
1996	38,800	*	326	2,377	3
1997	31,600	*	850	2,596	3
1998	28,700	*	1,047	2,320	3
<b>1999</b>	<b>26,600</b>	<b>*</b>	<b>931</b>	<b>3,078</b>	<b>3</b>
<b>Maui</b>					
1995	59,400	24,775	13,760	1,031	3
1996	57,200	27,144	11,652	858	3
1997	53,900	28,295	11,692	1,136	3
1998	58,700	28,413	11,755	1,051	3
<b>1999</b>	<b>60,200</b>	<b>28,325</b>	<b>9,519</b>	<b>1,056</b>	<b>3</b>

See footnotes at end of table.

Continued

## SUMMARY: Value of crop sales, by counties, 1995-99 -- Continued

Year	Macadamia nuts (in-shell)	Taro	Seed crops	Flowers and nursery products <sup>1</sup>	Total crops <sup>2</sup>
<i>1,000 dollars</i>					
<b>State</b>					
1995	37,740	3,264	13,000	68,175	421,089
1996	44,070	2,793	20,250	68,870	428,671
1997	43,500	2,805	25,150	66,655	418,661
1998	37,375	3,180	25,300	73,207	420,734
<b>1999</b>	<b>37,855</b>	<b>3,604</b>	<b>28,000</b>	<b>75,363</b>	<b>439,940</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	3	657	3	32,608	128,564
1996	3	689	3	34,275	125,428
1997	3	698	3	34,501	130,887
1998	3	627	3	39,153	121,676
<b>1999</b>	<b>3</b>	<b>632</b>	<b>3</b>	<b>41,578</b>	<b>121,056</b>
<b>Honolulu</b>					
1995	3	3	3	25,970	123,074
1996	3	3	3	25,115	121,045
1997	3	3	3	22,131	107,347
1998	3	3	3	23,743	124,630
<b>1999</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>22,654</b>	<b>141,892</b>
<b>Kauai</b>					
1995	3	1,997	3	1,801	55,387
1996	3	1,536	3	1,965	65,754
1997	3	1,657	3	1,804	59,425
1998	3	1,976	3	1,360	49,612
<b>1999</b>	<b>3</b>	<b>2,236</b>	<b>3</b>	<b>1,514</b>	<b>52,466</b>
<b>Maui</b>					
1995	3	3	3	7,796	114,064
1996	3	3	3	7,515	116,444
1997	3	3	3	8,219	121,002
1998	3	3	3	8,951	124,816
<b>1999</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>9,617</b>	<b>124,526</b>

\* = Less than \$50,000.

<sup>1</sup> Flowers, foliage, and nursery products.

<sup>2</sup> Total crop values shown for individual counties are actual. Sum of individual commodities may not add to total. Forage crops' and Forest product's value combined and included in total crop value.

<sup>3</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

# SUMMARIES

## SUMMARY: Value of livestock sales, total value of crop, livestock sales, aquaculture, and government payments, by counties, 1995-99<sup>1</sup>

Year	Cattle <sup>2</sup>	Hogs <sup>2</sup>	Milk	Eggs	Total livestock <sup>3</sup>	Aquaculture	Total crops, livestock and aquaculture <sup>4</sup>	Government payments <sup>5</sup>
1,000 dollars								
<b>State</b>								
1995	15,417	6,596	32,146	13,516	72,296	13,307	506,692	566
1996	13,175	6,585	29,234	12,963	67,017	15,655	511,343	NA
1997	14,323	4,902	29,479	12,986	67,799	16,600	503,060	NA
1998	16,861	5,235	33,293	11,220	72,708	16,620	510,062	NA
<b>1999</b>	<b>16,607</b>	<b>5,072</b>	<b>31,223</b>	<b>10,803</b>	<b>69,622</b>	<b>18,102</b>	<b>527,664</b>	<b>NA</b>
<b>Counties:</b>								
<b>Hawaii</b>								
1995	9,976	460	6	6	17,863	11,403	157,830	414
1996	8,168	455	6	6	16,732	13,197	155,357	NA
1997	9,658	404	6	6	19,078	13,380	163,345	NA
1998	11,312	420	6	6	20,846	13,383	155,905	NA
<b>1999</b>	<b>12,164</b>	<b>569</b>	<b>6</b>	<b>6</b>	<b>22,304</b>	<b>13,377</b>	<b>156,737</b>	<b>NA</b>
<b>Honolulu</b>								
1995	944	3,524	22,672	10,507	39,504	1,625	164,203	7
1996	713	3,754	19,130	9,905	35,435	2,055	158,535	NA
1997	581	3,036	19,204	10,002	34,909	2,120	144,376	NA
1998	514	3,451	21,838	8,193	36,189	2,100	162,919	NA
<b>1999</b>	<b>551</b>	<b>3,143</b>	<b>23,276</b>	<b>7,821</b>	<b>36,892</b>	<b>2,333</b>	<b>181,117</b>	<b>NA</b>
<b>Kauai</b>								
1995	875	963	6	6	4,244	NA	59,631	9
1996	869	879	6	6	4,170	NA	69,924	NA
1997	1,082	454	6	6	4,000	6	63,645	NA
1998	1,394	539	6	6	5,116	6	54,979	NA
<b>1999</b>	<b>1,027</b>	<b>466</b>	<b>6</b>	<b>6</b>	<b>4,536</b>	<b>6</b>	<b>58,800</b>	<b>NA</b>
<b>Maui</b>								
1995	3,621	1,649	6	6	10,684	279	125,027	136
1996	3,425	1,497	6	6	10,680	403	127,527	NA
1997	3,003	1,008	6	6	9,813	6	131,695	NA
1998	3,641	825	6	6	10,557	6	136,259	NA
<b>1999</b>	<b>2,865</b>	<b>894</b>	<b>6</b>	<b>6</b>	<b>5,890</b>	<b>6</b>	<b>131,010</b>	<b>NA</b>

NA = Not available.

<sup>1</sup> Revised.

<sup>2</sup> Excludes interfarm sales; includes out-of-State sales of slaughter cattle and feeder calves.

<sup>3</sup> Sum of individual commodities may not add to total. Includes sheep, wool, turkeys, horses, honey, beeswax, broilers, and chickens.

<sup>4</sup> Total includes aquaculture beginning 1994.

<sup>5</sup> Includes all government payments, such as Agricultural Conservation Program, Cattle Indemnity Payment Program, Dairy Indemnity Payment Program, Emergency Conservation Program, Forestry Incentives Program, Emergency Feed Program, wool payments, and sugar support.

<sup>6</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

# AGRICULTURE'S CONTRIBUTIONS TO HAWAII'S ECONOMY, 1992

## What is agriculture?

Agriculture is often misunderstood as being only farming. Agriculture is really an intricate system involving food and fiber producers, processors, manufacturers, and consumers.

## What is the impact of agriculture on Hawaii's economy?

Agriculture generates \$2.9 billion or 6.1% of total business sales in Hawaii's economy and 5.6% of Hawaii's employment (42,273 jobs). Agriculture is a major contributor to Hawaii's economy, supporting tourism and government.

## Are there contributions that could be attributed to agriculture but aren't because of how the economic appraisal is determined?

Yes, there are some contributions of agriculture not included as "agriculture" in this appraisal. Some examples include open space, ecotourism, watershed replenishment, cosmetics (kukui nut oil, etc.), rural lifestyle, adding diversity to Hawaii's economy, and improving our quality of life.

<b>Distribution Margins</b> Ground Transportation Water Transportation Air Transportation Wholesale Trade Retail Trade (including eating and drinking establishments)		<b>OUTPUT</b> (Business Sales) <b>\$2.9 Billion</b> (6.1% of HI Total)
<b>Food and Fiber Processing Sectors</b> Pineapple Processing Other Canned Vegetables and Fruits Sugar Processing Confectionery Products Salted and Roasted Nuts and Coffee Meat Products Milk Products Grain and Bakery Products Beverages Other Food Products and tobacco products Textiles		<b>WAGES, SALARIES, SELF-EMPLOYMENT INCOME</b> <b>\$.9 Billion</b> (4.5% of HI Total)
<b>Farm Production and Input Sectors</b> Sugarcane Vegetables Tree Nuts Pineapple Coffee Other Fruits Flowers, Ornamentals and Nursery Plants Dairy Farm Products Poultry and Eggs Cattle and Calves Hogs	Misc. Livestock (goats, sheep, etc.) Aquaculture Other Agricultural Products Forestry and Forest Products Commercial Fishing Agricultural, Forestry and Fishery Services Landscape and Yard Care Service Farm Machinery and Equipment Fertilizers	<b>VALUE ADDED</b> <b>\$1.4 Billion</b> (4.6% of HI Total)
		<b>EMPLOYMENT</b> <b>42,273 Jobs</b> (5.6% of HI Total)

Source: Khem R. Sharma, PingSun Leung, and Stuart Nakamoto, "Accounting for the linkages of Agriculture in Hawaii's Business Economy with an Input-Output Model: A Final Demand-Based Approach" forthcoming in Annals of Regional Science.

# RECORD HIGHS AND LOWS

## Record highs and lows for selected items, State of Hawaii

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year <sup>1</sup>	Quantity	Year <sup>1</sup>	
<b>Anthuriums</b>						
Area in production	1,000 sq. ft.	20,908	1983	7,013	1964	1964
Total sold	1,000 doz.	2,532	1980	216	1959	1959
Price <sup>2</sup>	\$/doz.	9.09	1997	.73	1966	1959
<b>Avocados</b>						
Harvested	Acres	330	1986	90	1975	1946
Production	1,000 lbs.	1,600	1982	400	1996	1946
Price <sup>2</sup>	¢/lb.	60.0	1999	6.1	1959	1946
<b>Bananas</b>						
Harvested	Acres	1,420	1999	550	1977	1946
Production	1,000 lbs.	24,500	1999	4,470	1983	1946
Price <sup>2</sup>	¢/lb.	41.0	1992	4.6	1946	1946
<b>Cabbage, Head</b>						
Harvested	Acres	740	1947	370	1971	1946
Production	1,000 lbs.	15,750	1989	6,800	1953	1946
Price <sup>2</sup>	¢/lb.	22.0	1995	3.0	1959	1946
<b>Coffee</b>						
Harvested	Acres	6,400	1999	1,650	1985	1946
Production	1,000 lbs.	18,496	1957	990	1982	1946
Price <sup>2</sup>	¢/lb.	390.0	1989	17.8	1946	1946
<b>Foliage, potted (indoor)</b>						
Sales (value)	\$1,000	14,896	1999	171	1972	1972
<b>Ginger Root</b>						
Harvested	Acres	360	1998	11	1974	1946
Production	1,000 lbs.	18,000	1998	352	1974	1946
Price <sup>2</sup>	¢/lb.	92.3	1982	16.2	1949	1946
<b>Guavas</b>						
Harvested	Acres	1,040	1990	60	1957	1955
Production	1,000 lbs.	24,300	1990	1,737	1957	1955
Price <sup>2</sup>	¢/lb.	15.0	1990	3.1	1956	1955
<b>Macadamia nuts</b>						
Harvested	Acres	19,300	1995	830	1953	1946
Production	1,000 lbs.	58,000	1997	630	1946	1946
Price <sup>2</sup>	¢/lb.	90.0	1988	15.2	1946	1946
<b>Papayas</b>						
Harvested	Acres	2,650	1985	320	1952	1946
Production	1,000 lbs.	80,500	1984	5,525	1947	1946
Price <sup>2</sup>	¢/lb.	48.9	1997	3.2	1946	1946

See footnotes at end of table.

Continued



# RECORD HIGHS AND LOWS

## Record highs and lows for selected items, State of Hawaii -- Continued

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year <sup>1</sup>	Quantity	Year <sup>1</sup>	
<b>Pineapples</b>						
Total in crop	Acres	76,700	1957	19,900	1997	1946
Production	1,000 tons	1,048	1955	324	1997	1950
Value (farm)	\$1,000	107,775	1991	29,700	1951	1950
<b>Sugar <sup>3</sup></b>						
Harvested	Acres	145,000	1933	30,300	1998	1909
Yield/acre (sugar)	Tons/acre	12.47	1986	4.81	1910	1909
Production (raw sugar)	1,000 tons	1,234	1966	354	1998	1909
Price <sup>2</sup> (sugar)	\$/Ton	633.00	1974	52.00	1940	1909
<b>Taro</b>						
Harvested	Acres	1,020	1948	320	1980	1946
Production	1,000 lbs.	14,195	1948	5,440	1983	1946
Price <sup>2</sup>	¢/lb.	53.0	1999	3.1	1949	1946
<b>Tomatoes</b>						
Harvested	Acres	600	1950	150	1972	1946
Production	1,000 lbs.	16,800	1999	3,300	1972	1946
Price <sup>2</sup>	¢/lb.	65.0	1990	9.1	1947	1946
<b>Watermelons</b>						
Harvested	Acres	870	1950	125	1979	1946
Production	1,000 lbs.	20,400	1995	1,130	1979	1946
Price <sup>2</sup>	¢/lb.	25.7	1981	6.4	1955	1946
<b>Cattle and calves</b>						
Jan. 1 inventory	Head	249,000	1971	130,000	1946	1946
Production (lv. wgt.)	1,000 lbs.	64,750	1989	25,470	1953	1946
Price <sup>2</sup>	\$/cwt.	57.50	1993	12.30	1946	1946
<b>Hogs and pigs</b>						
Dec. 1 inventory	Head	72,000	1965	28,000	1999	1960
Production (lv. wgt.)	1,000 lbs.	13,159	1978	6,105	1997	1960
Price <sup>2</sup>	\$/cwt.	83.10	1998	29.50	1964	1960
<b>Milk</b>						
Marketings	Million lbs.	157.1	1988	65.2	1946	1946
Production per cow	lbs./cow	14,494	1998	8,750	1960	1960
Price <sup>2</sup>	\$/cwt.	26.46	1999	6.75	1946	1946
<b>Eggs</b>						
Layers Dec. 1	Head	1,037,000	1974	302,000	1950	1950
Production	Million eggs	229.3	1979	120.0	1958	1958
Price <sup>2</sup>	¢/doz.	90.6	1997	39.2	1968	1958

<sup>1</sup> In case of a tie, the most recent year was used.

<sup>2</sup> Prices are annual or crop-year average.

<sup>3</sup> Primary data source, Hawaiian Sugar Planters' Association.

# FARM FINANCIAL INDICATORS

## Farm Business Balance Sheet, State of Hawaii, December 31, 1996-98

	1996	1997	1998
Number of farms	<sup>1</sup> 5,400	<sup>1</sup> 5,500	<b>5,500</b>
	<i>Thousand dollars</i>		
Farm assets	<sup>1</sup> 3,627,681	<sup>1</sup> 3,552,630	<b>3,948,736</b>
Real estate	<sup>1</sup> 3,214,614	<sup>1</sup> 3,209,268	<b>3,203,921</b>
Livestock and poultry <sup>2</sup>	74,538	<sup>1</sup> 92,328	<b>88,540</b>
Machinery and motor vehicles <sup>3</sup>	<sup>1</sup> 242,619	<sup>1</sup> 151,165	<b>150,502</b>
Crops <sup>4</sup>	0	0	<b>218,770</b>
Purchased inputs	9,367	10,979	<b>11,292</b>
Financial	<sup>1</sup> 86,543	<sup>1</sup> 88,890	<b>275,711</b>
Farm dept <sup>5</sup>	233,660	250,756	<b>264,786</b>
Real estate	136,728	145,236	<b>156,906</b>
Farm Credit System	50,824	58,613	<b>66,795</b>
Farm Service Agency <sup>6</sup>	26,507	24,705	<b>23,881</b>
Commercial banks	36,253	39,312	<b>42,316</b>
Life insurance companies	12,221	11,406	<b>12,826</b>
Individuals and others	10,922	11,200	<b>11,089</b>
CCC storage & drying loans	0	0	<b>0</b>
Nonreal estate	96,932	105,520	<b>107,880</b>
Farm Credit System	8,589	9,736	<b>9,122</b>
Farm Service Agency <sup>6</sup>	14,799	16,151	<b>16,335</b>
Commercial banks	33,243	36,164	<b>37,143</b>
Individuals and others	40,301	43,470	<b>45,281</b>
Equity	<sup>1</sup> 3,394,021	<sup>1</sup> 3,301,874	<b>3,683,950</b>
Ratio:			
Debt/equity	<sup>1</sup> 6.9	<sup>1</sup> 7.6	<b>7.2</b>
Debt/assets	<sup>1</sup> 6.4	<sup>1</sup> 7.1	<b>6.7</b>

<sup>1</sup> Revised.

<sup>2</sup> Excludes horses, mules, and broilers.

<sup>3</sup> Includes only farm share value for trucks and autos.

<sup>4</sup> All non-CCC crops held on farms plus the value above loan rate for crops held under CCC.

<sup>5</sup> Excludes debt for nonfarm purposes.

<sup>6</sup> Farmers Home Administration prior to 1994.

Source: Economic Research Service, USDA.

# 1999 SUGAR AND SPECIALTY CROP HIGHLIGHTS

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## SUGAR

Sugar production for 1999 rose 4 percent above the previous year to 368,000 tons of 96<sup>0</sup> raw sugar. An increase in acreage for harvest accounted for this higher production. Plantations were able to harvest 2.9 million tons of sugarcane from this acreage for an average yield of 81.7 tons of sugarcane per acre. Sugar prices during 1999 dipped 4 percent to \$352 per ton of 96<sup>0</sup> raw sugar, resulting in a total value of \$131.3 million for raw sugar, 1 percent below 1998.

## COFFEE

Hawaii farmers harvested 10.0 million pounds of coffee (parchment basis) during the 1999-2000 season, up 5 percent from the previous season and the largest harvest since the 1962-63 season. Farm prices across the State averaged \$2.10 per pound (parchment basis) for the 1999-2000 season, down 19 percent from the previous season. Total farm value of the 1999-2000 crop is estimated at \$21.0 million (parchment basis), down 15 percent from the 1998-99 season.

Hawaii county production totaled 3.0 million pounds (parchment basis) during the 1999-2000 season, down 14 percent from the previous season. Less-than-optimal weather conditions in the North and South Kona districts, where most of the Big Island's coffee is grown, resulted in a late and smaller harvest compared to the previous season. Heavy pruning at the end of the 1998-99 season and, to a lesser extent, relatively low farm prices also contributed to the drop in output.

## MACADAMIA NUTS

Hawaii's 1999-2000 macadamia nut crop is estimated at **56.5** million pounds net, wet in-shell, 1.0 million pounds below last season's crop. Weather conditions had mixed effects on orchards depending on location. Some areas received ample rainfall while others experienced an ongoing drought. Overall yields averaged 2,990 pounds per acre (net, wet in-shell), nearly unchanged from the previous season.

Total acreage in crop dropped 300 acres from the previous year to 19,900 acres and the lowest total in 14 years. Harvested acreage also declined by 300 acres totaling 18,900 acres. More acreage was abandoned this season along with the announcement that this will be the final season for a major Maui orchard.

The farm price for net, wet in-shell macadamia nuts averaged 67.0 cents per pound, up 2.0 cents from the 1998-1999 average. The farm value for the 1999-2000 crop is estimated at \$37.9 million, up 1.0 percent from the previous year. Hawaii growers continued to feel the impact from increased world competition.

## GINGER ROOT

Hawaii ginger root growers harvested an estimated 16.1 million pounds during the 1998/99 season, down 11 percent from the previous season's record-high output.

The majority of the State's ginger root is grown in the North and South Hilo districts of Hawaii island where weather conditions were less than ideal during the 1998/99 season. While ginger root needs abundant rainfall during the initial growing phase, it requires drier weather as the crop nears harvest. During the months preceding the start of the main harvest in December 1998, conditions were particularly wet. Weather conditions were even wetter in January and February of 1999 when harvesting was in full swing. As a result, disease became a problem for many farmers, and was the main reason for the 8-percent decline in average yields.

Farm prices increased for the first time in five seasons to an average of 50 cents per pound during the 1998/99 season, 25 percent higher than the previous season. Farm value is pegged at \$8.1 million for the 1998/99 season, up 12 percent as higher farm prices more than offset the decline in production. The \$8.1 million in farm revenues recorded by ginger root growers during the 1998/99 season was only 1 percent less than the record-high amount received in 1996/97. Although a 25-percent increase in the average farm price was a major reason for the near-record revenues, 1998/99's farm price was still the fourth lowest in the last 27 seasons.

### GINGER ROOT: Acreage, yield, production, price, and value, State of Hawaii, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
1995	135	43.0	5,800	87.0	5,046
1996	200	47.0	9,400	87.0	7,050
1997	275	44.0	12,100	75.0	8,107
1998	360	50.0	18,000	40.0	7,200
<b>1999</b>	<b>350</b>	<b>46.0</b>	<b>16,100</b>	<b>50.0</b>	<b>8,050</b>

### GINGER ROOT: U.S. imports, 1995-99

Year	Unground (including fresh)	Ground	Sweet	Candied	Total
			1,000 pounds		
1995	33,768	525	1,346	1,026	36,665
1996	30,367	1,220	1,819	1,065	34,471
1997	29,649	854	2,046	1,267	33,816
1998	30,375	563	1,816	1,512	34,265
<b>1999</b>	<b>33,679</b>	<b>669</b>	<b>2,059</b>	<b>2,000</b>	<b>38,406</b>

Source: Foreign Agricultural Trade of the United States, Economic Research Service, U.S. Department of Agriculture.

# HERBS, SEED CROPS

## FRESH HERBS: Production, price, and value, State of Hawaii, 1995-99

Year	Basil			Parsley	Chinese parsley (Cilantro)	Other herbs <sup>1</sup>	All herbs
	Sweet (Italian)	Asian	Total				

### Production - 1,000 pounds

1995	390	240	630	230	60	200	1,120
1996	510	390	900	200	70	230	1,400
1997	1,100	500	1,600	200	100	300	2,200
1998	1,200	500	1,700	125	75	500	2,400
<b>1999</b>	<b>1,500</b>	<b>600</b>	<b>2,100</b>	<b>190</b>	<b>90</b>	<b>520</b>	<b>2,900</b>

### Farm price - dollars per pound

1995	1.95	.85		1.30	1.70	2.60	
1996	2.20	1.40		1.70	2.70	2.40	
1997	2.00	1.00		1.75	2.65	2.30	
1998	1.90	.90		2.05	2.70	2.20	
<b>1999</b>	<b>2.00</b>	<b>.70</b>		<b>2.00</b>	<b>2.15</b>	<b>2.70</b>	

### Farm value - 1,000 dollars

1995	761	204	965	299	102	520	1,886
1996	1,122	546	1,668	340	189	552	2,749
1997	2,200	500	2,700	350	265	690	4,005
1998	2,280	450	2,730	256	203	1,100	4,289
<b>1999</b>	<b>3,000</b>	<b>420</b>	<b>3,420</b>	<b>380</b>	<b>194</b>	<b>1,404</b>	<b>5,398</b>

<sup>1</sup> Includes spearmint, dill, and other miscellaneous herbs. Also includes small amounts of basil and parsley for which an individual total could not be obtained or published separately in order to avoid disclosure of individual operations.

## SEED CROPS: Number of farms, acreage, outshipments, and value, State of Hawaii, 1995-99

Crop year <sup>1</sup>	Farms	Acreage				Total outshipments of seed	Value <sup>2</sup>		
		Total	Nursery	Seed increase	Grow-out or observation		Total	Seed corn	Other seed crops
	<i>Number</i>	<i>Acres</i>				<i>1,000 pounds</i>	<i>1,000 dollars</i>		
1995-96	6	1,600	630	910	60	2,025	13,000	12,475	525
1996-97	6	1,780	625	1,060	95	3,160	20,250	19,030	1,220
1997-98	8	2,960	1,040	1,830	90	4,050	25,150	24,684	466
1998-99	8	3,070	1,120	1,870	80	5,000	25,300	24,620	680
<b>1999-00</b>	<b>8</b>	<b>3,500</b>	<b>1,100</b>	<b>2,290</b>	<b>110</b>	<b>6,200</b>	<b>28,000</b>	<b>26,840</b>	<b>1,160</b>

<sup>1</sup> Seed crops are grown year-round in Hawaii. However, the main season is from November to June.

<sup>2</sup> Value is based on sales or gross operational budgets.

# SUGARCANE

## SUGARCANE: Number of farms, acreage, yield, production, price, and value, by counties, 1995-99<sup>1</sup>

Year	Farms <sup>2</sup>	Acreage		Yield per acre		Production of cane for sugar	Farm price <sup>3</sup>	Value of cane for sugar <sup>4</sup>
		In crop <sup>2</sup>	Harvested for sugar	Sugarcane <sup>3</sup>	Raw sugar 96°			
	<i>Number</i>	<i>----- 1,000 acres -----</i>		<i>----- Tons -----</i>		<i>1,000 tons</i>	<i>Dollars per ton</i>	<i>Million dollars</i>
<b>State</b>								
1995	9	83.8	48.5	81.5	10.16	3,953	32.30	127.7
1996	7	68.8	42.9	82.6	10.18	3,544	30.50	108.1
1997	4	67.8	32.0	91.4	11.15	2,925	29.20	85.5
1998	4	67.6	30.3	90.0	11.66	2,727	32.00	87.4
<b>1999</b>	<b>4</b>	<b>67.0</b>	<b>35.4</b>	<b>81.7</b>	<b>10.38</b>	<b>2,892</b>	<b>30.00</b>	<b>86.8</b>
<b>Counties:</b>								
<b>Hawaii</b>								
1995	1	2.4	6.5	66.2	7.31	430	28.40	12.2
1996	1	0	1.3	62.3	5.56	81	21.50	1.7
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
<b>1999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Honolulu</b>								
1995	2	8.0	7.4	95.8	10.96	709	29.70	21.1
1996	1	0	4.8	85.0	8.69	408	25.40	10.4
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
<b>1999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Kauai</b>								
1995	4	30.8	14.0	81.1	9.65	1,136	30.80	35.0
1996	3	26.5	16.7	81.0	9.34	1,353	28.70	38.8
1997	2	25.4	12.3	92.8	10.80	1,141	27.70	31.6
1998	2	24.7	11.3	83.5	10.29	944	30.40	28.7
<b>1999</b>	<b>2</b>	<b>23.7</b>	<b>13.9</b>	<b>66.0</b>	<b>8.08</b>	<b>917</b>	<b>29.00</b>	<b>26.6</b>
<b>Maui</b>								
1995	2	42.6	20.6	81.5	11.12	1,678	35.40	59.4
1996	2	42.3	20.1	84.7	11.55	1,702	33.60	57.2
1997	2	42.4	19.7	90.6	11.36	1,784	30.20	53.9
1998	2	42.9	19.0	93.8	12.48	1,783	32.90	58.7
<b>1999</b>	<b>2</b>	<b>43.3</b>	<b>21.5</b>	<b>91.9</b>	<b>11.86</b>	<b>1,975</b>	<b>30.50</b>	<b>60.2</b>

<sup>1</sup> Primary data source, Hawaii Agricultural Research Center.

<sup>2</sup> At end of year.

<sup>3</sup> Yield and farm price may not compute exactly due to rounding.

<sup>4</sup> Value of cane for sugar estimated by deducting processing and marketing costs from value of sugar and molasses. Processing costs based on toll charges paid by independent producers.

**SUGAR: Production of raw sugar and molasses, price, and value, by counties, 1995-99 <sup>1</sup>**

Year	Mill production		Average returns received <sup>2</sup>		Value of production		
	Raw sugar 96°	Molasses <sup>3</sup>	Raw sugar 96°	Molasses <sup>3</sup>	Raw sugar 96°	Molasses <sup>3</sup>	Total
	----- 1,000 tons -----		----- Dollars per ton -----		----- Million dollars -----		
<b>State</b>							
1995	492	163	387	59.00	190.5	9.7	200.2
1996	437	147	368	54.50	160.8	8.0	168.8
1997	357	131	357	38.60	127.5	5.0	132.5
1998	354	118	368	23.50	130.3	2.8	133.1
<b>1999</b>	<b>368</b>	<b>137</b>	<b>352</b>	<b>13.30</b>	<b>129.5</b>	<b>1.8</b>	<b>131.3</b>
<b>Counties:</b>							
<b>Hawaii</b>							
1995	47	16	387	55.50	18.2	.9	19.1
1996	7	3	350	38.60	2.5	.1	2.6
1997	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0
<b>1999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Honolulu</b>							
1995	81	29	387	61.10	31.3	1.8	33.1
1996	42	17	363	48.20	15.2	.8	16.0
1997	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0
<b>1999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Kauai</b>							
1995	135	44	388	59.00	52.4	2.6	55.0
1996	156	52	370	56.20	57.7	2.9	60.6
1997	133	41	354	39.80	47.1	1.6	48.7
1998	117	33	366	24.50	42.8	.8	43.6
<b>1999</b>	<b>113</b>	<b>38</b>	<b>351</b>	<b>13.70</b>	<b>39.7</b>	<b>.5</b>	<b>40.2</b>
<b>Maui</b>							
1995	229	74	387	58.90	88.6	4.4	93.0
1996	232	75	368	55.40	85.4	4.2	89.6
1997	224	90	359	38.00	80.4	3.4	83.8
1998	237	85	369	23.10	87.5	2.0	89.5
<b>1999</b>	<b>255</b>	<b>99</b>	<b>352</b>	<b>13.20</b>	<b>89.8</b>	<b>1.3</b>	<b>91.1</b>

<sup>1</sup> Primary data source, Hawaii Agricultural Research Center.<sup>2</sup> Derived from production and value. State and county prices may not compute exactly due to rounding.<sup>3</sup> Commercial.

# MACADAMIA NUTS

## MACADAMIA NUTS: Number of farms, acreage, yield, production, moisture, price, and value, State of Hawaii, 1995-99 crop years

Crop year <sup>1</sup>	Farms	Acreage		Yield per acre <sup>3</sup>	Production <sup>4</sup>		Average moisture		Farm prices <sup>4</sup>		Farm value <sup>8</sup>
		In crop	Harvested <sup>2</sup>		Gross <sup>5</sup>	Net <sup>6</sup>	Entire crop	Purchases only	Gross <sup>7</sup>	Net	
	<i>Number</i>	<i>----- Acres -----</i>			<i>----- 1,000 pounds -----</i>		<i>----- Percent -----</i>		<i>Cents per pound -----</i>		<i>1,000 dollars</i>
1995-96	700	20,300	19,300	2.6	57,000	51,000	18.3	19.4	66.2	74.0	37,740
1996-97	750	20,200	19,200	2.9	63,000	56,500	18.6	17.9	70.0	78.0	44,070
1997-98	800	20,200	19,200	3.0	65,000	58,000	19.5	19.6	66.9	75.0	43,500
1998-99	800	20,200	19,200	3.0	66,000	57,500	20.5	20.8	57.0	65.0	37,375
<b>1999-00</b>	<b>800</b>	<b>19,900</b>	<b>18,900</b>	<b>3.0</b>	<b>64,000</b>	<b>56,500</b>	<b>19.3</b>	<b>19.3</b>	<b>59.1</b>	<b>67.0</b>	<b>37,855</b>

<sup>1</sup> Season begins July 1st and ends June 30th of the following year. <sup>2</sup> Called bearing acreage prior to 1993-94 crop year. <sup>3</sup> Net production per bearing acre. <sup>4</sup> Wet in-shell basis, delivered to processors. <sup>5</sup> Gross pounds delivered for processing. <sup>6</sup> Gross pounds delivered for processing less total spoilage. <sup>7</sup> Farm value divided by gross production. <sup>8</sup> Net production multiplied by net farm price.

### U. S. imports of macadamia nuts, by country of origin, 1999

Country of origin	Type			Total
	Shelled or blanched	Pickled or otherwise prepared or preserved	Not shelled	
Metric tons				
Australia	2,323	0	18	2,341
Brazil	152	0	0	152
Canada	0	4	0	4
Colombia	5	0	0	5
Costa Rica	128	67	49	244
El Salvador	0	3	0	3
Guatemala	478	2	0	480
Indonesia	0	2	0	2
Japan	0	1	0	1
Kenya	217	0	0	217
Lebanon	0	9	0	9
Mainland China	15	0	5	20
Malawi	313	21	13	347
Mozambique	12	0	0	12
Rep. of S. Africa	1,013	0	24	1,037
Spain	8	0	0	8
Zimbabwe	57	0	0	57
Total <sup>1</sup>	4,721	109	109	4,939

<sup>1</sup> = Less than 1 metric ton.

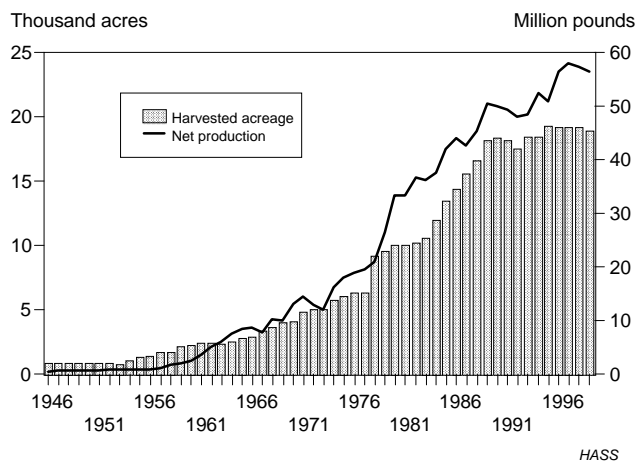
Source: U. S. Department of Commerce.

### U. S. imports of macadamia nuts, by type, 1990-99

Year	Type		
	Shelled or blanched	Pickled or otherwise prepared or preserved	Not shelled
<i>Metric tons</i>			
1990	2,159	126	49
1991	1,427	96	39
1992	1,775	49	28
1993	2,047	84	131
1994	1,726	95	56
1995	2,597	76	34
1996	2,481	70	14
1997	2,898	63	266
1998	3,459	40	60
<b>1999</b>	<b>4,721</b>	<b>109</b>	<b>109</b>

Source: U. S. Department of Commerce.

### MACADAMIA NUTS: Harvested Acreage and Net Production, State of Hawaii, 1946-99 Seasons





## COFFEE: Number of farms, acreage, yield, marketings, price, and value, by counties, 1995-99

Crop year <sup>1</sup>	Farms	Acreage		Yield <sup>2</sup>	Marketings <sup>3</sup>	Farm prices			Value of sales	Green production
		In crop	Harvested			Cherry	Parchment	All <sup>4</sup>		
	<i>Number</i>	<i>----- Acres -----</i>		<i>--- 1,000 pounds ---</i>		<i>----- Cents per pound -----</i>			<i>1,000 dollars</i>	<i>1,000 pounds</i>
<b>State</b>										
1995-96	580	6,800	5,500	1.0	5,400			300.0	16,200	4,320
1996-97	560	6,600	5,400	1.2	6,400			325.0	20,800	5,000
1997-98	585	7,000	5,800	1.6	9,400			300.0	28,200	7,720
1998-99	610	7,400	6,100	1.6	9,500			260.0	24,700	7,600
<b>1999-00</b>	<b>650</b>	<b>7,700</b>	<b>6,400</b>	<b>1.6</b>	<b>10,000</b>			<b>210.0</b>	<b>21,000</b>	<b>8,100</b>
<b>Counties:</b>										
<b>Hawaii</b>										
1995-96	570	1,880	1,470	1.7	2,500	100.0	515.0	460.0	11,500	2,000
1996-97	550	2,160	1,720	1.3	2,300	105.0	550.0	470.0	10,810	1,850
1997-98	575	2,490	1,900	1.5	2,850	135.0	700.0	570.0	16,245	2,300
1998-99	600	2,800	2,170	1.6	3,500	130.0	500.0	460.0	16,100	2,800
<b>1999-00</b>	<b>635</b>	<b>3,200</b>	<b>2,400</b>	<b>1.2</b>	<b>3,000</b>	<b>70.0</b>	<b>360.0</b>	<b>310.0</b>	<b>9,300</b>	<b>2,400</b>
<b>Honolulu/Kauai/Maui<sup>5</sup></b>										
1995-96	10	4,920	4,030	.7	2,900			<sup>6</sup> 162.0	4,700	2,320
1996-97	10	4,440	3,680	1.1	4,100			243.0	9,990	3,150
1997-98	10	4,510	3,900	1.7	6,550			183.0	11,955	5,420
1998-99	10	4,600	3,930	1.5	6,000			143.0	8,600	4,800
<b>1999-00</b>	<b>10</b>	<b>4,500</b>	<b>4,000</b>	<b>1.8</b>	<b>7,000</b>			<b>167.0</b>	<b>11,700</b>	<b>5,700</b>

<sup>1</sup> Coffee harvesting occurs throughout the year in Hawaii. The main harvest normally begins in late summer and extends to the early part of the following year.

<sup>2</sup> Average yields based on parchment equivalent marketings and harvested acreage.

<sup>3</sup> Expressed in parchment equivalent pounds. Coffee marketed in cherry form was converted to an equivalent parchment weight and added to parchment marketings.

<sup>4</sup> Represents an average farm price for parchment equivalent sales. Obtained by dividing farm revenues from the sale of cherry and parchment coffee by total marketings (parchment equivalent basis).

<sup>5</sup> Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

<sup>6</sup> Weighted combination of farm prices and the average International Coffee Organization price during October, November, and December on the New York Market (based on 1979 International Coffee Agreement).

# FLORICULTURE AND NURSERY PRODUCTS

Grower sales of Hawaii's flower and nursery products totaled a record \$75.4 million in 1999. The 1999 wholesale value was 3 percent higher than the \$73.2 million value for 1998. Orchids, lei flowers, foliage, and potted flowering plant categories registered increases in 1999.

Hawaii county, with \$41.6 million in sales, ranked number one in 1999. Honolulu farmers registered sales of \$22.7 million, 5 percent lower than the previous year. Maui sales totaled \$9.6 million, 7 percent higher than last year. Kauai sales, pegged at \$1.5 million, were 11 percent more than 1998.

## FLORICULTURE AND NURSERY PRODUCTS: Value of grower sales, by counties, 1995-99

Year	Cut flowers <sup>1</sup>	Orchids <sup>2</sup>	Lei flowers	Foliage <sup>3</sup>	Potted flowering plants	All other nursery products <sup>4</sup>	Unspecified sales <sup>5</sup>	Total
<i>1,000 dollars</i>								
<b>State</b>								
1995	15,333	12,890	3,935	16,576	3,295	14,623	1,523	68,175
1996	15,101	15,413	3,943	17,580	3,854	11,613	1,366	68,870
1997	13,969	15,479	3,813	16,989	3,751	11,250	1,404	66,655
1998	15,176	15,790	3,485	<sup>6</sup> 15,403	3,892	17,982	1,479	73,207
<b>1999</b>	<b>14,082</b>	<b>19,917</b>	<b>4,037</b>	<b>19,652</b>	<b>4,763</b>	<b>12,159</b>	<b>753</b>	<b>75,363</b>
<b>Counties:</b>								
<b>Hawaii</b>								
1995	12,082	6,197	977	10,187	564	2,082	519	32,608
1996	11,672	7,230	1,136	11,125	595	1,978	539	34,275
1997	10,939	8,063	1,226	11,124	882	1,726	541	34,501
1998	11,410	9,114	1,022	<sup>6</sup> 11,612	1,676	3,715	604	39,153
<b>1999</b>	<b>10,804</b>	<b>11,398</b>	<b>1,696</b>	<b>13,139</b>	<b>2,002</b>	<b>2,244</b>	<b>295</b>	<b>41,578</b>
<b>Honolulu</b>								
1995	995	5,964	1,610	5,458	1,827	9,530	586	25,970
1996	941	7,095	1,506	5,554	2,282	7,282	455	25,115
1997	848	6,136	1,332	4,957	1,917	6,562	379	22,131
1998	774	5,839	1,258	<sup>6</sup> 3,331	1,387	10,745	409	23,743
<b>1999</b>	<b>599</b>	<b>6,921</b>	<b>1,199</b>	<b>5,323</b>	<b>1,085</b>	<b>7,317</b>	<b>210</b>	<b>22,654</b>
<b>Kauai</b>								
1995	68	259	17	<sup>7</sup>	<sup>7</sup>	1,313	144	1,801
1996	117	344	73	<sup>7</sup>	<sup>7</sup>	1,308	123	1,965
1997	76	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	1,555	173	1,804
1998	138	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	1,090	132	1,360
<b>1999</b>	<b>122</b>	<b>413</b>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<b>869</b>	<b>110</b>	<b>1,514</b>
<b>Maui</b>								
1995	2,188	470	1,331	<sup>7</sup>	<sup>7</sup>	3,533	274	7,796
1996	2,371	744	1,228	<sup>7</sup>	<sup>7</sup>	2,923	249	7,515
1997	2,106	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	5,802	311	8,219
1998	2,854	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	5,763	334	8,951
<b>1999</b>	<b>2,557</b>	<b>1,185</b>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<b>5,737</b>	<b>138</b>	<b>9,617</b>

<sup>1</sup> Cut orchids included in "Orchids" category. <sup>2</sup> Excludes orchids used for lei flowers. <sup>3</sup> Includes potted, cut, and unfinished. <sup>4</sup> Includes bedding plants, plant rentals, sod, trees, and any other nursery products not elsewhere classified. Sum of county estimates may not add to State total due to rounding. <sup>5</sup> Includes grower sales greater than \$999 but less than \$10,000 which were not categorized. <sup>6</sup> Unfinished foliage, 1998 included in "All other nursery products". <sup>7</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup>

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>CUT FLOWERS</b>				
<b>Anthuriums - dozens</b>				
1995	69	11,310	965	7,042
1996	65	11,100	906	7,056
1997	61	11,420	758	6,892
1998	75	11,285	834	6,301
<b>1999</b>	<b>68</b>	<b>11,500</b>	<b>1,289</b>	<b>6,496</b>
<b>Birds of Paradise - dozens</b>				
1995	32	2,965	119	754
1996	29	2,740	102	554
1997	31	2,740	78	486
1998	24	2,285	66	495
<b>1999</b>	<b>25</b>	<b>5,650</b>	<b>83</b>	<b>561</b>
<b>Carnations, miniature - bunches</b>				
1995	9	385	110	383
1996	10	230	111	390
1997	8	205	91	320
1998	5	115	47	124
<b>1999</b>	<b>4</b>	<b>75</b>	<b>51</b>	<b>131</b>
<b>Chrysanthemums, pompon - bunches</b>				
1995	4	295	251	554
1996	4	275	225	479
1997	4	295	177	409
1998	6	265	196	358
<b>1999<sup>3</sup></b>				
<b>Ginger, pink - dozens</b>				
1995	46	2,225	85	564
1996	54	2,180	76	528
1997	40	1,915	52	402
1998	52	3,075	92	530
<b>1999</b>	<b>47</b>	<b>3,465</b>	<b>81</b>	<b>403</b>
<b>Ginger, red - dozens</b>				
1995	51	2,655	117	599
1996	52	2,660	88	444
1997	46	2,350	85	473
1998	63	4,860	142	794
<b>1999</b>	<b>60</b>	<b>3,380</b>	<b>226</b>	<b>807</b>

See footnotes at end of table.

Continued

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>Gingers, other - dozens</b>				
1995	17	355	6	48
1996	26	610	13	100
1997	16	575	14	92
1998	30	830	18	144
<b>1999</b>	<b>26</b>	<b>1,085</b>	<b>28</b>	<b>217</b>
<b>Heliconias - dozens</b>				
1995	50	4,315	49	495
1996	51	3,920	44	477
1997	47	3,445	40	432
1998	56	5,775	56	664
<b>1999</b>	<b>58</b>	<b>4,860</b>	<b>78</b>	<b>582</b>
<b>Proteas - stems</b>				
1995	28	5,835	1,877	1,071
1996	31	7,100	1,772	1,233
1997	30	5,625	1,353	1,160
1998	28	8,015	2,996	1,738
<b>1999</b>	<b>31</b>	<b>8,345</b>	<b>2,466</b>	<b>1,438</b>
<b>Other cut flowers - dozens</b>				
1995	35	NA	NA	3,823
1996	36	NA	NA	3,840
1997	35	NA	NA	3,303
1998	38	NA	NA	4,028
<b>1999</b>	<b>22</b>	<b>NA</b>	<b>NA</b>	<b>3,447</b>

See footnotes at end of table.

Continued

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>ORCHIDS</b>				
<b>Cymbidiums, cut - flowers</b>				
1995	9	440	251	159
1996	8	280	300	189
1997	8	275	348	137
1998	12	315	418	216
<b>1999</b>	<b>11</b>	<b>335</b>	<b>536</b>	<b>314</b>
<b>Dendrobiums, sprays - dozens</b>				
1995	58	3,435	410	3,078
1996	48	3,105	383	2,797
1997	56	3,505	368	2,549
1998	59	2,970	419	2,864
<b>1999</b>	<b>49</b>	<b>2,610</b>	<b>383</b>	<b>2,676</b>
<b>Oncidiums, sprays - dozens</b>				
1995	24	240	26	271
1996	28	275	40	386
1997	28	305	34	356
1998	32	485	58	580
<b>1999</b>	<b>32</b>	<b>355</b>	<b>47</b>	<b>462</b>
<b>Other orchids, sprays<sup>4</sup> - dozens</b>				
1995	11	NA	NA	30
1996	7	NA	NA	37
1997	5	NA	NA	25
1998	4	NA	NA	52
<b>1999</b>	<b>6</b>	<b>NA</b>	<b>NA</b>	<b>28</b>
<b>Dendrobiums, potted<sup>5</sup> - pots</b>				
1995	56	1,035	804	4,358
1996	63	1,200	1,131	5,185
1997	<sup>6</sup> 63	1,295	1,409	6,392
1998	63	NA	1,107	6,069
<b>1999</b>	<b>71</b>	<b>NA</b>	<b>1,149</b>	<b>6,194</b>
<b>Phalaenopsis, potted<sup>7</sup> - pots</b>				
1995				
1996				
1997				
1998	20	NA	221	1,178
<b>1999</b>	<b>22</b>	<b>NA</b>	<b>207</b>	<b>1,153</b>
<b>Other orchids, potted - pots</b>				
1995	52	1,115	1,085	4,994
1996	57	1,185	1,553	6,819
1997	56	1,235	1,295	6,020
1998	57	NA	951	4,831
<b>1999</b>	<b>65</b>	<b>NA</b>	<b>2,029</b>	<b>9,090</b>

See footnotes at end of table.

Continued

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>LEI/INDIVIDUAL BLOOMS</b>				
<b>Carnations - blooms</b>				
1995	10	NA	11,200	590
1996	11	NA	10,000	538
1997	7	NA	7,500	410
1998	9	NA	6,800	448
<b>1999</b>	<b>7</b>	<b>NA</b>	<b>5,600</b>	<b>396</b>
<b>Dendrobiums - blooms</b>				
1995	32	NA	22,400	716
1996	33	NA	24,700	740
1997	35	NA	24,800	725
1998	28	NA	28,900	855
<b>1999</b>	<b>27</b>	<b>NA</b>	<b>21,700</b>	<b>663</b>
<b>Pikake - strands</b>				
1995	5	NA	61.3	169
1996	4	NA	21.7	86
1997 <sup>8</sup>				
1998	5	NA	55.6	128
<b>1999</b>	<b>7</b>	<b>NA</b>	<b>83.3</b>	<b>222</b>
<b>Plumerias - blooms</b>				
1995	7	NA	19,500	489
1996	12	NA	29,900	717
1997	11	NA	31,800	833
1998	9	NA	23,800	601
<b>1999</b>	<b>10</b>	<b>NA</b>	<b>45,000</b>	<b>931</b>
<b>Tuberose - blooms</b>				
1995	8	NA	8	8
1996	7	NA	8	8
1997	4	NA	8	8
1998	6	NA	19,500	912
<b>1999</b>	<b>6</b>	<b>NA</b>	<b>20,400</b>	<b>959</b>
<b>Vanda, Miss Joaquim - blooms</b>				
1995	13	NA	22,500	677
1996	12	NA	22,200	627
1997	9	NA	22,300	657
1998	9	NA	10,900	292
<b>1999</b>	<b>7</b>	<b>NA</b>	<b>11,200</b>	<b>392</b>
<b>Other lei/individual - blooms</b>				
1995	NA	NA	NA	1,294
1996	NA	NA	NA	1,235
1997	NA	NA	NA	1,188
1998	NA	NA	NA	249
<b>1999</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>474</b>

See footnotes at end of table.

Continued

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>FOLIAGE</b>				
<b>Potted, primarily for indoor or patio use<sup>9</sup></b>				
1995	76	7,540	NA	11,812
1996	75	7,495	NA	13,000
1997	60	6,395	NA	12,552
1998	74	5,035	NA	14,617
<b>1999</b>	<b>65</b>	<b>5,265</b>	<b>NA</b>	<b>14,896</b>
<b>Potted, primarily for landscape use</b>				
1995	65	NA	NA	3,902
1996	62	NA	NA	3,527
1997	62	NA	NA	3,515
1998 <sup>10</sup>				
<b>1999<sup>10</sup></b>				
<b>Ti leaves, cut - leaves</b>				
1995	30	1,090	2,400	142
1996	36	1,480	3,100	218
1997	27	1,225	2,600	153
1998	41	2,585	6,000	412
<b>1999</b>	<b>43</b>	<b>2,575</b>	<b>5,800</b>	<b>459</b>
<b>Unfinished stock (for further growing on)</b>				
1995	21	25,600	NA	622
1996	19	20,000	NA	664
1997	16	17,205	NA	511
1998 <sup>10</sup>				
<b>1999<sup>10</sup></b>				
<b>Other greens, cut</b>				
1995	21	NA	NA	98
1996	24	NA	NA	171
1997	23	NA	NA	258
1998	35	NA	NA	374
<b>1999</b>	<b>18</b>	<b>NA</b>	<b>NA</b>	<b>116</b>

See footnotes at end of table.

Continued

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>POTTED FLOWERING PLANTS</b>				
<b>Anthuriums - pots</b>				
1995	16	68	61	97
1996	17	75	70	155
1997	21	190	140	390
1998	15	NA	113	321
<b>1999</b>	<b>24</b>	<b>NA</b>	<b>144</b>	<b>495</b>
<b>Bromeliads<sup>11</sup> - pots</b>				
1995				
1996				
1997				
1998	8	NA	88	423
<b>1999</b>	<b>17</b>	<b>NA</b>	<b>112</b>	<b>621</b>
<b>Chrysanthemums<sup>11</sup> - pots</b>				
1995				
1996				
1997				
1998	5	NA	127	573
<b>1999</b>	<b>4</b>	<b>NA</b>	<b>159</b>	<b>675</b>
<b>Poinsettias - pots</b>				
1995	27	545	221	904
1996	27	600	243	952
1997	28	590	238	900
1998	30	NA	263	1,012
<b>1999</b>	<b>29</b>	<b>NA</b>	<b>331</b>	<b>1,268</b>
<b>Other potted flowering plants</b>				
1995	39	NA	NA	2,294
1996	39	NA	NA	2,747
1997	40	NA	NA	2,461
1998	27	NA	NA	1,563
<b>1999</b>	<b>26</b>	<b>NA</b>	<b>NA</b>	<b>1,704</b>

See footnotes at end of table.

Continued



# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms having sales <sup>2</sup>	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
<b>ORNAMENTALS &amp; TREES</b>				
1995	46	NA	NA	4,112
1996	43	NA	NA	1,741
1997	42	NA	NA	1,561
1998 <sup>10</sup>				
<b>1999<sup>10</sup></b>				
<b>PLANT RENTALS</b>				
1995	41	NA	NA	3,293
1996	44	NA	NA	3,690
1997	37	NA	NA	2,925
1998	45	NA	NA	4,715
<b>1999</b>	<b>32</b>	<b>NA</b>	<b>NA</b>	<b>3,227</b>
<b>OTHER NURSERY PRODUCTS<sup>12</sup></b>				
1995	96	NA	NA	7,218
1996	96	NA	NA	6,182
1997	88	NA	NA	6,764
1998 <sup>13</sup>	NA	NA	NA	13,267
<b>1999<sup>13</sup></b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>13,113</b>
<b>UNSPECIFIED SALES<sup>14</sup></b>				
1995				1,523
1996				1,366
1997				1,404
1998				1,479
<b>1999</b>				<b>753</b>
<b>TOTAL</b>				
1995	705			68,175
1996	690			68,870
1997	670			66,655
1998	745			73,207
<b>1999</b>	<b>855</b>			<b>75,363</b>

NA = Not available. <sup>1</sup> Beginning 1992, includes only producers having total sales of \$10,000 or more. <sup>2</sup> Number for each individual flower item is count of those having sales of that item during each year; "Total" is unduplicated count. <sup>3</sup> Included with "Other cut flowers" to avoid disclosure of individual operations. <sup>4</sup> Includes cattleyas, vanda hybrids, phalaenopsis, and paphiopedilums. <sup>5</sup> Includes in bud/bloom and community pots. <sup>6</sup> Revised. <sup>7</sup> Prior to 1998, included with "Other orchids, potted". <sup>8</sup> Included with "Other lei/individual" to avoid disclosure of individual operations. <sup>9</sup> Includes hanging baskets. <sup>10</sup> Included with "Other nursery products". <sup>11</sup> Prior to 1998, included with "Other potted flowering plants". <sup>12</sup> Includes bedding plants and other flowers or nursery products not elsewhere classified. <sup>13</sup> Includes "Potted, primarily for landscape use", "Unfinished stock (for further growing on)", and "Ornamentals & trees". <sup>14</sup> Beginning 1992, includes sales of growers greater than \$999 but less than \$10,000 which were not categorized.

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Number of farms and growing area, by counties, 1995-99

Year	Farms	Greenhouse <sup>1</sup>	Artificial shade	Natural shade	Open field	Total area
	<i>Number</i>	<i>----- 1,000 square feet -----</i>			<i>----- Acres -----</i>	
<b>State</b>						
1995	705	3,770	24,215	15	2,040	2,698
1996	690	2,820	23,405	10	1,600	2,212
1997	670	2,805	23,885	10	1,535	2,158
1998	745	2,810	24,200	9	2,050	2,679
<b>1999</b>	<b>855</b>	<b>2,810</b>	<b>24,510</b>	<b>7</b>	<b>2,325</b>	<b>2,959</b>
<b>Counties:</b>						
<b>Hawaii</b>						
1995	333	2,910	18,880	15	1,115	1,630
1996	316	1,990	17,815	10	775	1,240
1997	312	2,000	18,805	10	875	1,363
1998	355	1,975	19,620	9	1,155	1,660
<b>1999</b>	<b>376</b>	<b>1,950</b>	<b>20,435</b>	<b>7</b>	<b>1,425</b>	<b>1,946</b>
<b>Honolulu</b>						
1995	220	550	4,585	0	380	498
1996	211	540	4,910	0	350	475
1997	202	510	4,380	0	310	422
1998	205	480	3,810	0	415	514
<b>1999</b>	<b>245</b>	<b>445</b>	<b>3,235</b>	<b>0</b>	<b>425</b>	<b>509</b>
<b>Kauai</b>						
1995	46	40	375	0	95	105
1996	52	60	345	0	60	69
1997	50	60	355	0	55	65
1998	40	75	295	0	45	53
<b>1999</b>	<b>80</b>	<b>90</b>	<b>235</b>	<b>0</b>	<b>60</b>	<b>68</b>
<b>Maui</b>						
1995	106	270	375	0	450	465
1996	111	230	335	0	415	428
1997	106	235	345	0	295	308
1998	145	280	475	0	435	452
<b>1999</b>	<b>154</b>	<b>325</b>	<b>605</b>	<b>0</b>	<b>415</b>	<b>436</b>

<sup>1</sup> Glass or glass substitute structure.

# FLORICULTURE AND NURSERY PRODUCTS

## FLORICULTURE AND NURSERY PRODUCTS: Out-of-State sales, State of Hawaii, 1995-99 <sup>1</sup>

Commodity	1995	1996	1997	1998	1999
<i>1,000 dollars</i>					
Anthuriums, cut	10,395	9,705	10,945	9,795	<b>10,685</b>
Birds of Paradise	905	650	720	945	<b>710</b>
Cymbidiums	80	115	80	130	<b>110</b>
Dendrobiums, sprays	3,120	4,110	3,545	3,820	<b>2,875</b>
Oncidium					<b>270</b>
Foliage, cut:					
Ti leaves	720	635	670	475	<b>400</b>
Other cut greens	885	1,010	885	1,070	<b>845</b>
Foliage, potted	9,910	9,500	10,320	12,220	<b>12,785</b>
Ginger, red	1,000	675	765	810	<b>875</b>
Gingers, other	740	605	450	800	<b>890</b>
Heliconias	740	800	820	955	<b>970</b>
Potted orchids:					
Dendrobiums	3,325	2,965	3,510	4,360	<b>4,120</b>
Phalaenopsis					<b>285</b>
Other orchids	3,420	3,995	5,410	6,485	<b>5,395</b>
Proteas	1,675	1,625	2,025	2,405	<b>2,130</b>
Unfinished potted foliage stock	315	70	70	400	<b>355</b>
All other flowers and nursery products	1,755	1,930	1,185	2,510	<b>2,245</b>
<b>Total</b>	<b>38,985</b>	<b>38,390</b>	<b>41,400</b>	<b>47,180</b>	<b>45,945</b>

<sup>1</sup> Based on F.O.B. island value. Includes both wholesale and retail sales. Does not include sales of cut flowers, leis, etc., purchased within the State and hand carried out.

## DENDROBIUM ORCHIDS: Sales and value, State of Hawaii, 1995-99 <sup>1</sup>

Year	Individual blossoms		Cut sprays		Potted plants				Total value
	Number sold	Value	Number sold	Value	In bud/bloom		Community pots		
					Number sold	Value	Number sold	Value	
	<i>Million blooms</i>	<i>1,000 dollars</i>	<i>1,000 dozens</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>----- 1,000 dollars -----</i>	
1995	22.4	716	410	3,078	762	4,137	42	221	8,152
1996	24.7	740	383	2,797	1,025	4,595	106	590	8,722
1997	24.8	725	368	2,549	1,249	5,599	160	793	9,666
1998	28.9	855	419	2,864	1,025	5,663	82	406	9,788
1999	21.7	663	383	2,676	964	5,678	185	516	9,533

<sup>1</sup> Includes only producers with total sales of \$10,000 or more.

## 1999 FRUIT HIGHLIGHTS

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Hawaii fruit growers harvested 785.1 million pounds of fruit for fresh and processed utilization in 1999, up 6 percent from 1998. Fruit acreage totaled 29,066 acres, 1 percent higher than last year. Compared to 1998, pineapple, papaya, banana, and avocado output was higher. Pineapples continued to account for the majority, 90 percent, of the State's 1999 fruit output, with 78 percent of the fresh utilization and 97 percent of the processed utilization. Lower outputs were experienced by guavas and other fruits.

The farm value of all fruits totaled \$129.7 million in 1999, an increase of 11 percent from 1998 and the highest since 1991 mainly due to an increase in the pineapple value; however, farm values were also up for papaya, banana, and avocado. Guava and other fruit values have declined. Honolulu still leads the counties in value of fruits, with pineapple being the top contributor.

### Ž HAWAII

Farm sales from Hawaii island totaled \$15.5 million, up 6 percent from a year ago mainly due to a higher papaya value. Papaya sales made up 60 percent of the island's total with farm receipts of \$9.3 million. Banana output continued to be ranked second with a value of \$3.8 million, 11 percent more than 1998. Guavas, citrus, tropical specialty fruits, strawberries, avocados, and grapes made up the remaining 15 percent of Hawaii island's fruit value.

### Ž HONOLULU

Honolulu county grown fruits generated sales of \$81.7 million in 1999 compared to \$70.9 million during the previous year. Honolulu county fruit sales continued to rank first among the counties with 63 percent of the State fruit value. Increases in value were experienced by pineapples and other fruits. Pineapple farm value accounted for 90 percent of the county total. Revenue from other fruits were up for the sixth consecutive year and 32 percent more than the 1998 total. Bananas and papayas contributed most of the value of fruits other than pineapple.

### Ž KAUAI

Kauai's fruit sales for 1999 increased 33 percent from the previous year to \$3.1 million. Guavas, papayas, and tropical specialty fruits accounted for most of the value. Bananas, avocados, and citrus contributed the remainder.

### Ž MAUI

The value of fruit sales from Maui county was virtually unchanged from a year ago at \$29.4 million. The pineapple value was just below last year's total while the other fruits were higher. Pineapples accounted for 96 percent of the Maui county value. Papayas, bananas, tropical specialty fruits, and other fruits made up the rest of the value.

# MARKET SUPPLY: FRESH FRUITS

## MARKET SUPPLY: Fresh market fruits, State of Hawaii, 1995-99 <sup>1 2</sup>

Commodity		1995	1996	1997 <sup>3</sup>	1998 <sup>3</sup>	1999 <sup>3</sup>	Hawaii market share 1999
		----- 1,000 pounds -----					Percent
Apples:	Inshipments	15,610	12,294				
Avocados:	Inshipments	700	882				
	Hawaii	500	400	500	500	<b>600</b>	
Bananas:	Inshipments	16,460	16,668				
	Hawaii	13,000	13,000	13,700	21,000	<b>NA</b>	
Cantaloupe melons:	Inshipments	10,800	13,347				
	Hawaii <sup>4</sup>						
Grapefruit:	Inshipments	2,450	2,710				
Grapes:	Inshipments	8,380	7,333				
Honeydew melons:	Inshipments	6,610	6,133				
	Hawaii <sup>4</sup>						
Lemons:	Inshipments	3,800	3,432				
Limes:	Inshipments <sup>5</sup>	550	590	4	4	4	
	Hawaii <sup>5</sup>	273	295				
Nectarines:	Inshipments	2,150	1,631				
Oranges:	Inshipments	15,420	16,388				
	Hawaii <sup>4</sup>						
Papayas:	Hawaii <sup>6</sup>	13,935	13,300	13,710	14,470	<b>18,075</b>	
Pears:	Inshipments	3,580	3,403				
Pineapples:	Hawaii	48,200	40,000	33,400	42,000	<b>NA</b>	
Tangerines:	Inshipments	760	1,022	4	4	4	
	Hawaii	37	42				
Watermelons:	Inshipments	2,450	2,784				
	Hawaii	20,400	17,100	16,800	15,800	<b>11,400</b>	
All other fruits:	Inshipments	8,630	8,090				
	Hawaii	2,020	2,087	4,683	3,474	<b>6,556</b>	
Unspecified fruits:	Inshipments <sup>7</sup>	4,201	3,037				
Total:	Inshipments	102,551	99,744				
	Hawaii	98,365	86,224	82,793	97,244	<b>36,631</b>	
	All	200,916	185,968				

NA = Not applicable.

<sup>1</sup> Excludes pineapples, guavas, papayas, and passion fruit used for processing, and quantities shipped out-of-State.

<sup>2</sup> Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

<sup>3</sup> Inshipment data not available at time of printing.

<sup>4</sup> Data not shown separately to avoid disclosure of individual operations but combined and included with "All other fruits".

<sup>5</sup> Prior to 1992 included with "All other fruits".

<sup>6</sup> Fresh intrastate sales only. Excludes mainland and foreign fresh sales.

<sup>7</sup> Inshipment of "Unspecified fruits" were prorated based on the amount of known fruits imported into the State.

# TROPICAL SPECIALTY FRUIT

## TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1995-99<sup>1</sup>

Crop	Farms <sup>2</sup>	Acreage		Number of trees		Utilization	Farm price <sup>4</sup>	Value of sales
		In crop	Harvested <sup>3</sup>	Total	Bearing			
	<i>Number</i>	<i>----- Acres -----</i>				<i>1,000 pounds</i>	<i>Dollars per pound</i>	<i>1,000 dollars</i>
<b>Cherimoya</b>								
1995	35	30		2,400	600	8.6	1.47	12.6
1996	45	25	10	2,200	400	12.9	1.25	16.1
1997 <sup>5</sup>								
1998 <sup>5</sup>								
<b>1999<sup>5</sup></b>								
<b>Lychee</b>								
1995	55	60		3,200	1,600	187.2	1.75	327.4
1996 <sup>5</sup>								
1997	70	225	75	11,000	2,900	114.3	1.81	206.4
1998	75	245	60	13,200	3,200	157.2	1.96	308.5
<b>1999</b>	<b>80</b>	<b>275</b>	<b>45</b>	<b>12,900</b>	<b>3,100</b>	<b>86.0</b>	<b>2.81</b>	<b>242.0</b>
<b>Mango</b>								
1995 <sup>5</sup>								
1996	65	100	35	7,400	1,200	184.5	.77	142.9
1997 <sup>5</sup>								
1998 <sup>5</sup>								
<b>1999<sup>6</sup></b>	<b>80</b>	<b>240</b>	<b>85</b>	<b>11,200</b>	<b>4,600</b>	<b>162.0</b>	<b>1.02</b>	<b>166.0</b>
<b>Rambutan</b>								
1995 <sup>5</sup>								
1996	45	80	60	5,400	4,300	81.2	2.95	239.2
1997	45	95	60	6,000	4,300	264.3	2.71	716.6
1998	50	180	70	9,800	4,700	139.2	3.03	421.5
<b>1999</b>	<b>60</b>	<b>205</b>	<b>70</b>	<b>9,400</b>	<b>3,500</b>	<b>113.0</b>	<b>2.88</b>	<b>326.0</b>
<b>Specialty pineapple</b>								
1995	15	25		--	--	319.1	.50	160.1
1996 <sup>5</sup>								
1997 <sup>5</sup>								
1998 <sup>7</sup>								
<b>1999<sup>7</sup></b>								
<b>Starfruit</b>								
1995 <sup>6</sup>	45	40		3,700	3,400	419.7	.18	76.0
1996 <sup>6</sup>	50	35	30	3,500	3,300	276.1	.27	74.5
1997 <sup>6</sup>	35	25	20	2,100	1,900	89.8	.46	41.4
1998	25	25	25	1,900	1,900	37.1	.97	36.0
<b>1999<sup>6</sup></b>	<b>25</b>	<b>20</b>	<b>15</b>	<b>1,800</b>	<b>1,700</b>	<b>96.0</b>	<b>.66</b>	<b>63.0</b>
<b>Other</b>								
1995	--	260		18,200	7,400	316.2	--	411.0
1996	--	340	130	15,700	6,300	439.3	--	398.3
1997	--	305	85	15,000	5,100	681.1	--	481.3
1998 <sup>6</sup>	--	350	85	23,900	5,000	376.1	--	402.9
<b>1999<sup>6</sup></b>	<b>--</b>	<b>170</b>	<b>55</b>	<b>8,900</b>	<b>3,700</b>	<b>189.0</b>	<b>--</b>	<b>243.0</b>

See footnotes at end of table.

Continued

# TROPICAL SPECIALTY FRUIT

## TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Crop	Farms <sup>2</sup>	Acreage		Number of trees		Utilization	Farm price <sup>4</sup>	Value of sales
		In crop	Harvested <sup>3</sup>	Total	Bearing			
	<i>Number</i>	<i>----- Acres -----</i>				<i>1,000 pounds</i>	<i>Dollars per pound</i>	<i>1,000 dollars</i>
<b>Total</b>								
1995	115	415		27,500	13,000	1,250.8	--	987.1
1996	130	580	265	34,200	15,500	994.0	--	871.0
1997	120	650	240	34,100	14,200	1,149.5	--	1,445.7
1998	130	800	240	48,800	14,800	709.6	--	1,168.9
<b>1999</b>	<b>140</b>	<b>910</b>	<b>270</b>	<b>44,200</b>	<b>16,600</b>	<b>646.0</b>	<b>--</b>	<b>1,040.0</b>

-- = Not applicable. <sup>1</sup>Tropical specialty fruits include: abiu, atemoya, breadfruit, caimito, canistel, cherimoya, durian, jaboticaba, jackfruit, langsat, longan, loquat, lychee, mango, mangosteen, persimmon, poha, rambutan, rollina, sapodilla, soursop, specialty pineapple, starfruit, white sapote, and other fruits. If not shown separately, then combined and included in "Other" category. <sup>2</sup>A farm may grow more than one type of fruit. Total farms is an unduplicated count; excludes home use. <sup>3</sup>Data series beginning in 1996. <sup>4</sup>Equivalent delivered packing house or processing plant door. Excludes costs of packing and shipping or value added by processing. <sup>5</sup>Data not shown separately to avoid disclosure of individual operations but combined and included with "Other". <sup>6</sup>Production and price include fresh and processed. <sup>7</sup>Specialty pineapple will be discontinued but included in all pineapple totals on page 39.

## TROPICAL SPECIALTY FRUIT: Number of farms, acreage, production, and value, by counties, 1995-99

Island	Farms	Acreage		Utilization	Value of sales
		In crop	Harvested <sup>1</sup>		
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>1,000 dollars</i>
<b>State</b>					
1995	115	415		1,250.8	987.1
1996	130	580	265	994.0	871.0
1997	120	650	240	1,149.5	1,445.7
1998 <sup>2</sup>	130	800	240	709.6	1,168.9
<b>1999</b>	<b>140</b>	<b>910</b>	<b>270</b>	<b>646.0</b>	<b>1,040.0</b>
<b>Counties:</b>					
<b>Hawaii<sup>3</sup></b>					
1995	70	275		518.5	250.7
1996	80	270	135	403.0	315.5
1997	80	290	95	<sup>4</sup>	<sup>4</sup>
1998	80	315	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>
<b>1999</b>	<b>85</b>	<b>375</b>	<b>110</b>	<b>256.0</b>	<b>397.0</b>
<b>Honolulu/Kauai/Maui<sup>5</sup></b>					
1995	45	140		732.3	736.4
1996	50	310	130	591.0	555.5
1997	40	360	145	<sup>4</sup>	<sup>4</sup>
1998	50	485	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>
<b>1999</b>	<b>55</b>	<b>535</b>	<b>160</b>	<b>390.0</b>	<b>643.0</b>

<sup>1</sup>Data series beginning in 1996.

<sup>2</sup>Specialty pineapple excluded from 1998 totals.

<sup>3</sup>Processed fruit included.

<sup>4</sup>Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

<sup>5</sup>Kauai and Maui combined with Honolulu to avoid disclosure of individual operations beginning 1993.

# PINEAPPLES

## PINEAPPLES: Number of farms, acreage, production, disposition, price, and value, State of Hawaii, 1995-99<sup>1</sup>

Year	Farms	Acreage used for crop	Production (fresh weight)	Disposition		Farm price		Value of production (fresh weight)
				Processed (fresh weight)	Fresh market	Processed <sup>2</sup>	Fresh market <sup>3</sup>	
	<i>Number</i>	<i>1,000 acres</i>	<i>----- 1,000 tons -----</i>			<i>----- Dollars per ton -----</i>		<i>1,000 dollars</i>
1995	15	19.9	345	220	125	113	500	87,360
1996	15	20.0	347	232	115	117	598	95,914
1997	15	19.9	324	221	103	127	618	91,721
1998	15	21.0	332	221	111	131	575	92,776
<b>1999</b>	<b>15</b>	<b>21.0</b>	<b>352</b>	<b>230</b>	<b>122</b>	<b>126</b>	<b>594</b>	<b>101,448</b>

<sup>1</sup> Includes specialty pineapple.

<sup>2</sup> Estimate to reflect value of fresh fruit delivered processing plant door based on average contract prices of independent growers.

<sup>3</sup> Estimate to reflect value at wholesale establishments for local sales and shipper dock for mainland and foreign sales.

## PINEAPPLES: Fresh market sales, processed value, and total value, State of Hawaii, 1995-99

Year	Fresh market sales		Processor value of canned fruit and juice production <sup>3</sup>	Total value: Fresh market and processed <sup>4</sup>
	Quantity <sup>1</sup>	Value <sup>2</sup>		
	<i>----- 1,000 tons -----</i>	<i>----- Million dollars -----</i>		
1995	125	62.5	72.5	135.0
1996	115	68.8	78.2	147.0
1997	103	63.7	73.0	136.7
1998	111	63.8	81.3	145.1
<b>1999</b>	<b>122</b>	<b>72.5</b>	<b>72.3</b>	<b>144.8</b>

<sup>1</sup> Market Analysis and News Branch of the State Department of Agriculture. Includes all destinations.

<sup>2</sup> Value FAS shipping point for outshipments, delivered wholesalers local sales.

<sup>3</sup> Value of canned fruit and juices and by-product shipped out-of-State and sold within State.

<sup>4</sup> Pineapple Growers Association of Hawaii.

## PINEAPPLES: Outshipments of fresh pineapples, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
	<i>1,000 pounds</i>												
1995	16,108	13,926	18,816	15,016	19,751	18,712	19,323	19,031	15,434	15,407	15,580	14,735	201,839
1996	16,211	15,682	19,437	15,894	16,460	14,827	19,168	15,645	12,166	16,166	15,249	13,187	190,092
1997	12,892	12,771	18,014	12,686	15,916	15,403	19,096	11,882	12,919	14,609	12,647	13,765	172,600
1998	12,109	11,237	17,451	13,841	13,248	14,618	18,926	16,245	12,498	16,518	15,532	17,695	179,918
<b>1999</b>	<b>13,564</b>	<b>12,237</b>	<b>18,052</b>	<b>16,603</b>	<b>18,477</b>	<b>18,805</b>	<b>20,645</b>	<b>13,305</b>	<b>15,929</b>	<b>16,490</b>	<b>17,700</b>	<b>15,388</b>	<b>197,195</b>

Source of outshipment data: Market Analysis and News Branch of the State Department of Agriculture.



# AVOCADOS, BANANAS

## AVOCADOS: Number of farms, acreage, yield, production, price, and value, State of Hawaii, 1995-99

Year	Farms	Acreage <sup>1</sup>		Yield per acre <sup>2</sup>	Production	Farm price	Value of sales
		In crop	Bearing				
<i>Number</i>		<i>----- Acres -----</i>		<i>----- 1,000 pounds -----</i>		<i>Cents per pound</i>	<i>1,000 dollars</i>
1995	80	350	210	2.4	500	54.5	273
1996	110	330	180	2.2	400	53.5	214
1997	95	340	250	2.0	500	53.0	265
1998	95	330	240	2.1	500	52.0	260
<b>1999</b>	<b>120</b>	<b>360</b>	<b>230</b>	<b>2.6</b>	<b>600</b>	<b>60.0</b>	<b>360</b>

<sup>1</sup> At end of year.

<sup>2</sup> Production divided by bearing acreage.

## BANANAS: Distribution of harvested acreage by yield, State of Hawaii, 1998-99

Stratum: Yield per harvested acre	Variety							
	Hawaii Apple <sup>1</sup>				Cavendish <sup>2</sup>			
	Harvested acres		Average yield		Harvested acres		Average yield	
	1998	1999	1998	1999	1998	1999	1998	1999
	<i>Pounds</i>		<i>----- Pounds -----</i>		<i>----- Pounds -----</i>		<i>----- Pounds -----</i>	
Over 30,000	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>	18	<sup>3</sup>	35,100	<sup>3</sup>
20,001 - 30,000	<sup>4</sup> 24	<sup>4</sup> 50	<sup>4</sup> 31,900	<sup>4</sup> 22,400	241	<sup>4</sup> 529	24,900	<sup>4</sup> 27,300
10,001 - 20,000	157	150	14,400	14,500	574	301	16,600	16,200
10,000 and Under	329	324	4,100	5,200	77	60	5,700	5,200
Overall Average Yield	510	530	8,600	9,200	910	890	18,200	22,000

<sup>1</sup> Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian.

<sup>2</sup> Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are included with Cavendish.

<sup>3</sup> Data not shown separately but combined and included in "20,001-30,000" pounds per acre.

<sup>4</sup> Includes "Over 30,000" pounds per acre.

# BANANAS

## BANANAS: Acreage by variety, State of Hawaii, 1995-99 <sup>1</sup>

Year	Variety	
	Hawaii Apple <sup>2</sup>	Cavendish <sup>3</sup>
1995	535	585
1996	560	680
1997	540	1,050
1998	660	940
<b>1999</b>	<b>700</b>	<b>1,060</b>

<sup>1</sup> As of February following year, i.e., acreage data shown for 1999 is as of February 1, 2000. <sup>2</sup> Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian. <sup>3</sup> Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are also included with Cavendish.

## BANANAS: Number of farms, acreage, yield, production, price, and value, by counties, 1995-99

Year	Farms	Acreage		Yield per acre (harvested)	Fresh utilization	Farm price	Value of sales
		In crop <sup>1</sup>	Harvested <sup>2</sup>				
<i>Number                      ----- Acres -----                      ----- 1,000 pounds -----                      Cents per pound                      1,000 dollars</i>							
<b>State <sup>3</sup></b>							
1995	170	1,120	880	14.8	13,000	40.0	5,200
1996	170	1,240	960	13.5	13,000	40.0	5,200
1997	170	1,590	950	14.4	13,700	38.0	5,206
1998	200	1,600	1,420	14.8	21,000	35.0	7,350
<b>1999</b>	<b>210</b>	<b>1,760</b>	<b>1,420</b>	<b>17.3</b>	<b>24,500</b>	<b>35.0</b>	<b>8,575</b>
<b>Counties:</b>							
<b>Hawaii</b>							
1995	41	600	445	19.6	8,700	35.0	3,045
1996	41	695	495	17.0	8,400	35.5	2,982
1997	48	840	550	17.8	9,800	34.0	3,352
1998	50	740	665	16.7	11,100	31.0	3,430
<b>1999</b>	<b>45</b>	<b>830</b>	<b>650</b>	<b>18.2</b>	<b>11,800</b>	<b>32.5</b>	<b>3,819</b>
<b>Honolulu</b>							
1995	78	405	345	8.9	3,060	50.5	1,545
1996	78	435	380	8.4	3,200	48.5	1,555
1997	75	635	320	8.6	2,750	46.5	1,276
1998	75	715	655	13.1	8,600	38.0	3,268
<b>1999</b>	<b>85</b>	<b>785</b>	<b>670</b>	<b>16.9</b>	<b>11,300</b>	<b>35.5</b>	<b>4,039</b>
<b>Kauai</b>							
1995	29	55	45	9.3	420	44.0	184
1996	29	55	45	11.3	510	42.5	218
1997	28	40	35	12.9	450	43.5	196
1998	40	60	50	10.0	500	42.5	212
<b>1999</b>	<b>40</b>	<b>60</b>	<b>50</b>	<b>10.2</b>	<b>510</b>	<b>42.5</b>	<b>218</b>
<b>Maui</b>							
1995	22	60	45	18.2	820	52.0	426
1996	22	55	40	22.3	890	50.0	445
1997	19	75	45	15.6	700	54.5	382
1998	35	85	50	16.0	800	55.0	440
<b>1999</b>	<b>40</b>	<b>85</b>	<b>50</b>	<b>17.8</b>	<b>890</b>	<b>56.0</b>	<b>499</b>

<sup>1</sup> As of February following year, i.e., acreage data shown for 1999 is as of February 1, 2000. <sup>2</sup> Acreage reflects quarterly average during the year.

<sup>3</sup> Sum of county estimates may not add to State total due to rounding.

## BANANAS: Production, acreage, and price, State of Hawaii, 1995-99

Year	Fresh utilization													Acreage	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average	In crop	Harvested

----- 1,000 pounds -----

----- Acres -----

### All Bananas

1995	1,020	931	980	1,055	972	1,083	1,120	1,060	1,035	1,190	1,241	1,313	13,000	1,120	880
1996	1,175	840	825	825	816	862	1,200	1,544	1,281	1,442	1,264	926	13,000	1,240	960
1997	1,021	840	764	802	990	1,118	1,362	1,419	1,230	1,432	1,365	1,357	13,700	1,590	950
1998	1,196	1,096	1,261	1,359	1,516	1,943	2,163	2,117	2,112	2,095	2,063	2,079	21,000	1,600	1,420
1999	1,739	1,743	1,968	1,714	2,124	2,090	2,323	2,500	2,363	2,151	1,820	1,965	24,500	1,760	1,420

### Hawaii Apple<sup>1</sup>

1995	220	219	298	307	306	327	275	326	355	347	345	375	3,700	535	440
1996	333	272	254	270	322	300	354	438	427	487	424	319	4,200	560	495
1997	369	327	342	303	311	279	303	364	326	364	349	363	4,000	540	445
1998	344	345	388	367	308	281	322	367	385	390	397	506	4,400	660	510
1999	487	442	418	392	398	402	360	386	390	429	403	393	4,900	700	530

### Cavendish<sup>2</sup>

1995	800	712	682	748	666	756	845	734	680	843	896	938	9,300	585	440
1996	842	568	571	555	494	562	846	1,106	854	955	840	607	8,800	680	465
1997	652	513	422	499	679	839	1,059	1,055	904	1,068	1,016	994	9,700	1,050	505
1998	852	751	873	992	1,208	1,662	1,841	1,750	1,727	1,705	1,666	1,573	16,600	940	910
1999	1,252	1,301	1,550	1,322	1,726	1,688	1,963	2,114	1,973	1,722	1,417	1,572	19,600	1,060	890

## FARM PRICE FOR FRESH MARKET

Cents per pound

### All Bananas<sup>3</sup>

1995	38.0	38.0	40.0	40.0	41.5	40.5	40.0	41.5	42.0	40.0	39.5	39.5	40.0
1996	39.5	41.0	41.0	41.0	42.5	41.5	39.5	39.0	40.0	39.0	39.0	39.5	40.0
1997	44.0	44.5	45.0	43.0	38.0	36.0	34.5	35.5	36.0	35.5	34.5	34.5	38.0
1998	36.0	38.5	37.5	38.0	37.5	35.5	34.5	33.5	33.0	32.5	33.5	34.5	35.0
1999	37.0	38.5	38.0	37.5	35.0	33.5	32.5	33.0	33.0	33.5	36.5	35.0	35.0

### Hawaii Apple<sup>1</sup>

1995	50.5	51.0	51.5	51.5	52.0	52.0	52.0	51.5	51.5	51.5	51.0	51.0	51.5
1996	50.5	52.0	52.0	52.0	51.5	51.5	50.0	49.5	49.5	49.0	49.5	50.0	50.5
1997	48.5	49.5	49.5	50.0	50.5	52.0	51.5	51.0	51.0	50.0	50.0	49.5	50.0
1998	49.5	49.5	49.0	49.0	50.0	53.0	53.0	51.0	50.5	50.0	49.5	48.5	50.0
1999	48.0	47.5	47.0	47.0	47.5	47.5	47.5	48.0	47.5	47.5	48.0	48.0	47.5

### Cavendish<sup>4</sup>

1995	34.0	34.0	35.0	35.0	36.0	35.5	36.0	36.5	36.5	35.5	35.0	35.0	35.5
1996	34.5	36.0	36.0	36.0	36.5	36.0	35.5	35.0	35.0	33.5	34.0	34.0	35.0
1997	38.0	41.5	42.0	42.0	38.5	32.0	30.5	29.5	30.0	30.0	30.0	29.0	33.0
1998	30.0	33.5	32.5	33.5	34.0	32.5	31.0	29.5	28.5	28.5	29.5	30.0	30.5
1999	32.5	35.0	35.5	34.5	31.5	30.0	29.5	30.0	30.0	29.5	33.0	31.5	31.5

<sup>1</sup> Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian.

<sup>2</sup> Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are combined with Cavendish beginning 1993. Previous publications provide a breakdown for Bluefields.

<sup>3</sup> Includes Bluefields, Dwarf Bluefields, and other bananas.

<sup>4</sup> Includes Chinese, Williams, Valery, and Grand Nain.

# PAPAYAS

## PAPAYAS: Number of farms, acreage, yield, utilization, price, and value, by counties, 1995-99 <sup>1</sup>

Year	Farms <sup>2</sup>	Acreage <sup>2</sup>		Yield per acre <sup>3</sup>	Utilized produc- tion	Utilization		Price per pound			Value of utilized production
		In crop	Harvested			Fresh	Processed	Fresh	Processed <sup>4</sup>	All	
<i>Number      ----- Acres -----      ----- 1,000 pounds -----      ----- Cents -----      1,000 dollars</i>											
<b>State</b>											
1995	244	3,740	2,435	20.9	50,800	41,900	8,900	43.5	3.0	36.4	18,494
1996	281	3,610	1,835	22.8	41,800	37,800	4,000	44.8	3.0	40.8	17,054
1997	241	4,055	1,985	19.5	38,800	35,700	3,100	52.9	3.0	48.9	18,978
1998	262	3,555	2,120	18.8	39,900	35,600	4,300	35.0	3.0	31.6	12,589
<b>1999</b>	<b>222</b>	<b>3,500</b>	<b>1,940</b>	<b>21.9</b>	<b>42,400</b>	<b>39,400</b>	<b>3,000</b>	<b>40.2</b>	<b>3.0</b>	<b>37.6</b>	<b>15,929</b>
<b>Counties:</b>											
<b>Hawaii</b>											
1995	200	3,500	2,280	21.1	48,115	39,215	<sup>5</sup> 8,900	42.7		35.4	17,008
1996	240	3,230	1,660	23.0	38,195	34,195	<sup>5</sup> 4,000	44.3		40.0	15,281
1997	200	3,385	1,615	19.1	30,910	27,810	<sup>5</sup> 3,100	51.8		46.9	14,501
1998	208	2,715	1,640	18.9	31,050	26,750	<sup>5</sup> 4,300	31.1		27.2	8,439
<b>1999</b>	<b>168</b>	<b>2,595</b>	<b>1,415</b>	<b>20.1</b>	<b>28,455</b>	<b>25,455</b>	<b><sup>5</sup> 3,000</b>	<b>36.3</b>		<b>32.8</b>	<b>9,327</b>
<b>Honolulu</b>											
1995	24	70	40	16.8	670	670	0	97.1		97.1	651
1996	21	215	80	22.9	1,830	1,830	0	51.2		51.2	937
1997	20	425	255	22.3	5,695	5,695	0	59.4		59.4	3,383
1998	23	525	300	18.3	5,485	5,485	0	55.1		55.1	3,022
<b>1999</b>	<b>22</b>	<b>550</b>	<b>335</b>	<b>24.7</b>	<b>8,265</b>	<b>8,265</b>	<b>0</b>	<b>52.3</b>		<b>52.3</b>	<b>4,322</b>
<b>Kauai</b>											
1995	13	120	80	15.8	1,260	1,260	<sup>5</sup>	<sup>6</sup> 41.4		<sup>6</sup> 41.4	<sup>6</sup> 835
1996	15	135	75	17.3	1,295	1,295	<sup>5</sup>	<sup>6</sup> 47.1		<sup>6</sup> 47.1	<sup>6</sup> 836
1997	17	185	80	16.0	1,280	1,280	<sup>5</sup>	<sup>6</sup> 49.8		<sup>6</sup> 49.8	<sup>6</sup> 1,094
1998	21	245	135	15.3	2,065	2,065	<sup>5</sup>	<sup>6</sup> 33.5		<sup>6</sup> 33.5	<sup>6</sup> 1,128
<b>1999</b>	<b>22</b>	<b>285</b>	<b>145</b>	<b>32.8</b>	<b>4,760</b>	<b>4,760</b>	<b><sup>5</sup></b>	<b><sup>6</sup> 40.1</b>		<b><sup>6</sup> 40.1</b>	<b><sup>6</sup> 2,280</b>
<b>Maui</b>											
1995	7	50	35	21.6	755	755	0	<sup>6</sup>		<sup>6</sup>	<sup>6</sup>
1996	5	30	20	24.0	480	480	0	<sup>6</sup>		<sup>6</sup>	<sup>6</sup>
1997	4	60	35	26.1	915	915	0	<sup>6</sup>		<sup>6</sup>	<sup>6</sup>
1998	10	70	45	28.9	1,300	1,300	0	<sup>6</sup>		<sup>6</sup>	<sup>6</sup>
<b>1999</b>	<b>10</b>	<b>70</b>	<b>45</b>	<b>20.4</b>	<b>920</b>	<b>920</b>	<b>0</b>	<b><sup>6</sup></b>		<b><sup>6</sup></b>	<b><sup>6</sup></b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Average of monthly estimates.

<sup>3</sup> Utilized production divided by acreage harvested.

<sup>4</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

<sup>5</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

<sup>6</sup> Maui combined with Kauai to avoid disclosure of individual operations.

**PAPAYAS: Acreage, utilization, outshipments, and price, State of Hawaii, 1995-99**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres <sup>1</sup></b>													
1995	2,375	2,395	2,480	2,535	2,595	2,630	2,380	2,335	2,330	2,375	2,370	2,415	2,435
1996	2,365	2,265	2,145	2,030	1,940	1,830	1,740	1,670	1,630	1,530	1,400	1,470	1,835
1997	1,500	1,485	2,115	2,120	2,125	2,255	2,325	2,350	1,955	1,955	1,920	1,715	1,985
1998	1,735	1,740	1,750	1,775	2,175	2,460	2,440	2,420	2,310	2,240	2,215	2,185	2,120
<b>1999</b>	<b>2,190</b>	<b>2,135</b>	<b>2,100</b>	<b>2,145</b>	<b>2,155</b>	<b>2,025</b>	<b>2,035</b>	<b>2,025</b>	<b>1,615</b>	<b>1,620</b>	<b>1,605</b>	<b>1,635</b>	<b>1,940</b>
<b>Utilization (fresh and processed) - 1,000 pounds</b>													
1995	4,675	4,525	5,185	3,795	3,950	4,810	3,975	3,830	3,545	4,535	4,215	3,760	50,800
1996	4,010	3,760	3,150	2,945	3,605	3,385	3,395	3,500	3,305	3,935	3,395	3,415	41,800
1997	3,535	3,075	3,005	2,835	2,945	3,045	3,110	2,905	3,330	3,870	3,480	3,665	38,800
1998	3,395	2,910	2,995	3,605	3,790	3,160	3,620	3,420	2,770	3,200	3,335	3,700	39,900
<b>1999</b>	<b>3,310</b>	<b>3,155</b>	<b>3,315</b>	<b>3,475</b>	<b>3,655</b>	<b>3,440</b>	<b>3,490</b>	<b>3,705</b>	<b>3,695</b>	<b>3,835</b>	<b>3,785</b>	<b>3,540</b>	<b>42,400</b>
<b>Total fresh papaya utilization - 1,000 pounds</b>													
1995	4,005	3,815	4,255	3,065	2,935	3,825	3,415	3,505	2,670	3,125	3,775	3,510	41,900
1996	3,575	3,530	2,990	2,815	3,385	3,105	2,875	2,990	3,005	3,450	2,940	3,140	37,800
1997	3,425	3,020	2,915	2,720	2,730	2,760	2,845	2,705	2,990	3,415	3,030	3,145	35,700
1998	2,875	2,655	2,845	3,375	2,995	2,685	3,095	2,785	2,495	3,165	3,250	3,380	35,600
<b>1999</b>	<b>2,975</b>	<b>2,985</b>	<b>3,155</b>	<b>3,260</b>	<b>3,365</b>	<b>3,215</b>	<b>3,225</b>	<b>3,315</b>	<b>3,480</b>	<b>3,520</b>	<b>3,565</b>	<b>3,340</b>	<b>39,400</b>
<b>Intrastate fresh papaya utilization - 1,000 pounds</b>													
1995	1,385	1,335	1,470	1,185	920	1,190	1,060	1,135	890	1,040	1,250	1,075	13,935
1996	1,270	1,265	880	985	1,030	1,005	925	1,095	1,195	1,300	1,150	1,200	13,300
1997	1,335	1,290	1,195	930	1,005	980	935	1,100	1,145	1,450	1,260	1,085	13,710
1998	1,020	1,130	1,025	1,310	1,160	945	1,210	1,155	1,040	1,415	1,499	1,561	14,470
<b>1999</b>	<b>1,405</b>	<b>1,390</b>	<b>1,305</b>	<b>1,500</b>	<b>1,645</b>	<b>1,410</b>	<b>1,385</b>	<b>1,475</b>	<b>1,610</b>	<b>1,695</b>	<b>1,720</b>	<b>1,535</b>	<b>18,075</b>
<b>Outshipments of fresh papayas - 1,000 pounds</b>													
1995	2,620	2,480	2,785	1,880	2,015	2,635	2,355	2,370	1,780	2,085	2,525	2,435	27,965
1996	2,305	2,265	2,110	1,830	2,355	2,100	1,950	1,895	1,810	2,150	1,790	1,940	24,500
1997	2,090	1,730	1,720	1,790	1,725	1,780	1,910	1,605	1,845	1,965	1,770	2,060	21,990
1998	1,855	1,525	1,820	2,065	1,835	1,740	1,885	1,630	1,455	1,750	1,751	1,819	21,130
<b>1999</b>	<b>1,570</b>	<b>1,595</b>	<b>1,850</b>	<b>1,760</b>	<b>1,720</b>	<b>1,805</b>	<b>1,840</b>	<b>1,840</b>	<b>1,870</b>	<b>1,825</b>	<b>1,845</b>	<b>1,805</b>	<b>21,325</b>
<b>Farm price for fresh market sales (to all markets) - cents per pound</b>													
1995	23.9	40.8	53.9	80.0	98.7	50.1	28.6	29.1	36.3	37.9	26.8	28.3	43.5
1996	32.3	34.9	45.3	73.9	51.0	39.1	45.1	42.7	43.0	40.2	46.6	49.9	44.8
1997	39.8	42.2	63.9	93.4	89.4	68.4	54.1	51.3	47.0	33.7	34.1	32.0	52.9
1998	31.6	38.9	50.2	43.2	33.4	40.4	36.5	31.8	35.9	30.0	23.8	26.8	35.0
<b>1999</b>	<b>29.5</b>	<b>35.5</b>	<b>41.1</b>	<b>44.2</b>	<b>44.7</b>	<b>44.3</b>	<b>43.7</b>	<b>44.4</b>	<b>39.9</b>	<b>37.0</b>	<b>35.1</b>	<b>42.7</b>	<b>40.2</b>

<sup>1</sup> Total is average of monthly data.

# GUAVAS

## GUAVAS: Total quantity processed, farm production, number of farms, acreage, price, and value, by counties, 1995-99

Year	Farm production					
	Farms	Acreage		Utilized Production	Farm price <sup>2</sup>	Value of sales
		In crop <sup>1</sup>	Harvested			
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
<b>State</b>						
1995	135	920	750	16,400	13.8	2,263
1996	140	920	750	16,300	13.8	2,249
1997	130	900	730	15,900	12.2	1,940
1998	125	890	710	14,600	12.2	1,781
<b>1999</b>	<b>130</b>	<b>870</b>	<b>630</b>	<b>10,700</b>	<b>9.1</b>	<b>974</b>
<b>Counties:</b>						
<b>Hawaii</b>						
1995	130	430	310	7,200	13.8	994
1996	135	440	370	7,500	13.8	1,035
1997	125	440	350	6,400	12.2	781
1998	120	430	320	7,100	12.2	866
<b>1999</b>	<b>125</b>	<b>430</b>	<b>240</b>	<b>5,400</b>	<b>9.1</b>	<b>492</b>
<b>Honolulu/Kauai/Maui<sup>3</sup></b>						
1995	5	490	440	9,200	13.8	1,270
1996	5	480	380	8,800	13.8	1,214
1997	5	460	380	9,500	12.2	1,159
1998	5	460	390	7,500	12.2	915
<b>1999</b>	<b>5</b>	<b>440</b>	<b>390</b>	<b>5,300</b>	<b>9.1</b>	<b>482</b>

<sup>1</sup> Includes planting intentions.

<sup>2</sup> State average grower price. Equivalent F.O.B. plant, county of production.

<sup>3</sup> Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

## GUAVAS: Quantity, price, and value, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual total <sup>1</sup>	Farm price <sup>2</sup>	Value
	<i>----- 1,000 pounds -----</i>													<i>Cents per lb.</i>	<i>1,000 dollars</i>
1995	348	394	328	175	150	401	1,101	3,855	4,208	4,119	825	496	16,400	13.8	2,263
1996	365	164	293	566	1,153	1,612	767	911	4,058	4,273	1,291	847	16,300	13.8	2,249
1997	123	667	913	552	763	1,270	1,150	1,607	3,559	2,565	1,164	1,567	15,900	12.2	1,940
1998	971	658	900	809	679	504	855	1,150	1,849	3,154	1,912	1,159	14,600	12.2	1,781
<b>1999</b>	<b>487</b>	<b>286</b>	<b>819</b>	<b>480</b>	<b>279</b>	<b>491</b>	<b>633</b>	<b>735</b>	<b>1,468</b>	<b>2,216</b>	<b>1,962</b>	<b>844</b>	<b>10,700</b>	<b>9.1</b>	<b>974</b>

<sup>1</sup> Sum of monthly estimates may not add to annual total due to rounding.

<sup>2</sup> State average grower price. Equivalent F.O.B. plant, county of production.

# **1999 VEGETABLE, MELON, AND TARO HIGHLIGHTS**

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## **VEGETABLES AND MELONS**

Total production of vegetables and melons for 1999 is estimated at 99.95 million pounds, up 7 percent from 1998. Vegetable and melon growers also posted gains in harvested acreage at 7,840 acres (up 25 percent) and in farm value at \$43 million (up 8 percent) during 1999.

Weather conditions improved from 1998, but remained generally dry in most areas. The only exception was the windward side of the Big Island which experienced very wet conditions for the first 4 months of 1999. For the most part, however, generally dry conditions were favorable for growth since most vegetables and melons were subject to irrigation.

Tomato growers topped all other vegetable and melons in 1999 with production estimated at a record high 16.8 million pounds, up 65 percent from 1998. A combination of increased harvested acreage and favorable weather helped produce the record-breaking tomato crop.

## **TARO**

Hawaii taro production is estimated at 6.8 million pounds for 1999, up 13 percent from 1998 and the highest total since 1995. The combined price for poi and Chinese taro averaged 53 cents per pound in 1999, unchanged from the record high achieved in 1998. The boost in production, combined with steady farm prices, enabled taro farmers to post farm revenues of \$3.6 million, up 13 percent from 1998 and a new record high.

Taro for processing totaled 6.5 million pounds in 1999, up 14 percent from 1998. The bulk of all processed taro is made into poi. In 1999, that amount totaled 6.2 million pounds, up 15 percent from 1998. Favorable weather, as well as the successful adoption of improved cultural practices that helped reduce the incidence of the Taro Pocket Rot disease, were the main reasons for the increase in production.

Fresh taro sales, comprised mainly of Chinese taro was estimated at 300,000 pounds in 1999, unchanged from 1998. Farm prices for Chinese taro increased 1 percent in 1999 to average 53.5 cents per pound.

# MARKET SUPPLY: FRESH VEGETABLES

## MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1995-99 <sup>1</sup>

Commodity		1995	1996	1997 <sup>2</sup>	1998 <sup>2</sup>	1999 <sup>2</sup>	Hawaii market share 1999
		----- 1,000 pounds -----					Percent
Beans, snap:	Inshipments	390	500				
	Hawaii	540	520	700	900	<b>1,000</b>	
Bittermelon:	Inshipments	45	67				
	Hawaii	110	150	180	350	<b>550</b>	
Broccoli:	Inshipments	6,570	6,199				
	Hawaii	300	500	450	350	<b>300</b>	
Burdock:	Inshipments	45	12				
	Hawaii	330	300	220	200	<b>250</b>	
Cabbage, Chinese:	Inshipments	580	642				
	Hawaii <sup>3</sup>	6,570	6,450	6,500	6,700	<b>6,400</b>	
Cabbage, head:	Inshipments	1,140	1,521				
	Hawaii	12,900	14,100	13,000	15,300	<b>14,300</b>	
Cabbage, mustard:	Inshipments	35	53				
	Hawaii	1,700	1,700	1,500	1,500	<b>1,600</b>	
Carrots:	Inshipments	11,340	11,296	4	4	4	
	Hawaii	60	--				
Cauliflower:	Inshipments	1,630	1,192			4	
	Hawaii	200	120	200	130		
Celery:	Inshipments	6,190	6,029				
	Hawaii	1,250	1,150	1,250	1,300	<b>1,300</b>	
Corn, sweet:	Inshipments	910	1,370				
	Hawaii	1,300	1,400	1,300	1,100	<b>1,700</b>	
Cucumbers:	Inshipments	1,750	1,328				
	Hawaii	4,000	4,800	5,500	6,000	<b>5,800</b>	
Daikon:	Inshipments	140	95				
	Hawaii <sup>3</sup>	2,780	2,800	2,600	2,450	<b>2,200</b>	
Dasheen:	Inshipments	120	152			4	
	Hawaii	130	100	95		4	
Eggplant:	Inshipments	520	535				
	Hawaii	1,200	1,300	1,500	1,300	<b>1,500</b>	
Ginger root:	Inshipments	390	20				
	Hawaii	5,800	9,400	12,100	18,000	<b>16,100</b>	
Lettuce:	Inshipments	16,950	16,496				
	Hawaii	1,500	1,500	1,600	1,700	<b>1,500</b>	
Lotus root:	Inshipments	35	9				
	Hawaii <sup>4</sup>						
Onions, dry:	Inshipments	17,490	17,235				
	Hawaii	2,300	2,000	1,700	3,500	<b>3,400</b>	

See footnotes at end of table.

Continued



# MARKET SUPPLY: FRESH VEGETABLES

## MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1995-99<sup>1</sup> -- Continued

Commodity		1995	1996	1997 <sup>2</sup>	1998 <sup>2</sup>	1999 <sup>2</sup>	Hawaii market share 1999
		----- 1,000 pounds -----					Percent
Onions, green:	Inshipments	200	385				
	Hawaii	1,500	1,400	1,400	1,500	<b>1,700</b>	
Parsley, American:	Inshipments	65	86				
	Hawaii	230	200	200	125	<b>190</b>	
Peas, Chinese:	Inshipments	320	310				
	Hawaii	25	25	25	<sup>4</sup>	<sup>4</sup>	
Peppers, green:	Inshipments	2,300	2,509				
	Hawaii	2,400	2,600	2,000	3,000	<b>3,000</b>	
Potatoes:	Inshipments <sup>5</sup>	40,940	43,988				
	Hawaii <sup>4</sup>						
Potatoes, sweet:	Inshipments	1,350	1,260				
	Hawaii	2,800	2,500	2,400	1,900	<b>2,900</b>	
Pumpkins:	Inshipments	1,830	1,748				
	Hawaii	180	250	450	550	<b>450</b>	
Radish:	Inshipments	1	2				
	Hawaii	170	200	160	150	<b>130</b>	
Romaine:	Inshipments	5,090	5,362				
	Hawaii	1,700	1,700	1,900	3,300	<b>2,700</b>	
Squash, Italian:	Inshipments	1,750	2,086				
	Hawaii	620	700	1,400	1,500	<b>1,900</b>	
Squash, oriental:	Inshipments	73	79				
	Hawaii	200	200	300	240	<b>600</b>	
Taro:	Inshipments	469	509				
	Hawaii <sup>3</sup>	800	500	400	300	<b>300</b>	
Tomatoes:	Inshipments	13,320	14,376				
	Hawaii	6,000	7,000	10,200	10,200	<b>16,800</b>	
Watercress:	Inshipments	0	22				
	Hawaii	1,200	1,000	1,020	980	<b>970</b>	
All other vegetables:	Inshipments	14,250	15,013				
	Hawaii	6,955	7,560	11,300	10,401	<b>12,710</b>	
Unspecified vegetables:	Inshipments <sup>6</sup>	6,329	4,750				
Total:	Inshipments	154,557	158,036				
	Hawaii	67,750	74,125	83,550	94,926	<b>102,250</b>	
	All	222,307	232,161				

-- = Negligible.

<sup>1</sup> Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

<sup>2</sup> Inshipment data not available at time of printing.

<sup>3</sup> Fresh market only.

<sup>4</sup> Data not shown separately to avoid disclosure of individual operations but combined and included with "All other vegetables".

<sup>5</sup> For processing and fresh market.

<sup>6</sup> Inshipment of "Unspecified vegetables" were prorated based on the amount of known vegetables imported into the State.

# OTHER VEGETABLES

## OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1995-99

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>Bittermelon</b>					
1995	10	11.0	110	100.0	110
1996	15	10.0	150	105.0	158
1997	20	9.0	180	95.0	171
1998	35	10.0	350	80.0	280
<b>1999</b>	<b>40</b>	<b>13.8</b>	<b>550</b>	<b>74.0</b>	<b>407</b>
<b>Broccoli</b>					
1995	110	2.7	300	60.5	182
1996	150	3.3	500	51.0	255
1997	140	3.2	450	54.0	243
1998	110	3.2	350	50.0	175
<b>1999</b>	<b>75</b>	<b>4.0</b>	<b>300</b>	<b>50.0</b>	<b>150</b>
<b>Burdock</b>					
1995	30	11.0	330	180.0	594
1996	20	15.0	300	180.0	540
1997	15	14.7	220	145.0	319
1998	15	13.3	200	160.0	320
<b>1999</b>	<b>20</b>	<b>12.5</b>	<b>250</b>	<b>150.0</b>	<b>375</b>
<b>Cabbage, mustard</b>					
1995	180	9.4	1,700	40.0	680
1996	200	8.5	1,700	43.0	731
1997	150	10.0	1,500	46.0	690
1998	140	10.7	1,500	40.0	600
<b>1999</b>	<b>140</b>	<b>11.4</b>	<b>1,600</b>	<b>39.0</b>	<b>624</b>
<b>Carrots</b>					
1995	5	12.0	60	33.0	20
1996 <sup>1</sup>					
1997 <sup>1</sup>					
1998 <sup>1</sup>					
<b>1999<sup>1</sup></b>					
<b>Cauliflower</b>					
1995	15	13.3	200	47.0	94
1996	10	12.0	120	42.5	51
1997	15	13.3	200	45.0	90
1998	10	13.0	130	60.0	78
<b>1999<sup>1</sup></b>					

See footnotes at end of table.

Continued

# OTHER VEGETABLES

## OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1995-99 -- Continued

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>Dasheen</b>					
1995	7	18.6	130	102.0	133
1996	7	14.3	100	94.0	94
1997	5	19.0	95	99.0	94
1998 <sup>1</sup>					
<b>1999 <sup>1</sup></b>					
<b>Peas, Chinese</b>					
1995	5	5.0	25	180.0	45
1996	5	5.0	25	180.0	45
1997	5	5.0	25	170.0	43
1998 <sup>1</sup>					
<b>1999 <sup>1</sup></b>					
<b>Pumpkins</b>					
1995	20	9.0	180	23.0	41
1996	30	8.3	250	30.0	75
1997	65	6.9	450	29.0	131
1998	50	11.0	550	20.0	110
<b>1999</b>	<b>45</b>	<b>10.0</b>	<b>450</b>	<b>39.0</b>	<b>176</b>
<b>Radish</b>					
1995	15	11.3	170	57.0	97
1996	20	10.0	200	58.0	116
1997	15	10.7	160	57.0	91
1998	15	10.0	150	59.0	89
<b>1999</b>	<b>15</b>	<b>8.7</b>	<b>130</b>	<b>60.0</b>	<b>78</b>
<b>Squash, Oriental (Hyotan and Togan)</b>					
1995	10	20.0	200	40.0	80
1996	10	20.0	200	42.0	84
1997	25	12.0	300	42.0	126
1998	15	16.0	240	37.0	89
<b>1999</b>	<b>30</b>	<b>20.0</b>	<b>600</b>	<b>36.0</b>	<b>216</b>

<sup>1</sup> Data not shown separately to avoid disclosure of individual operations.

# SNAP BEANS

## SNAP BEANS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State<sup>1</sup></b>					
1995	120	4.5	540	99.5	537
1996	160	3.3	520	97.0	504
1997	130	5.4	700	99.0	693
1998	200	4.5	900	82.0	738
<b>1999</b>	<b>200</b>	<b>5.0</b>	<b>1,000</b>	<b>88.0</b>	<b>880</b>
<b>Counties:</b>					
<b>Hawaii/Kauai<sup>2</sup></b>					
1995	70	3.3	230	94.4	217
1996	107	2.1	220	89.0	196
1997	70	3.1	220	92.0	202
1998	85	2.9	250	80.0	200
<b>1999</b>	<b>85</b>	<b>3.2</b>	<b>270</b>	<b>84.2</b>	<b>227</b>
<b>Honolulu</b>					
1995	20	4.5	90	102.5	92
1996	16	3.4	55	95.1	52
1997	15	8.7	130	101.5	132
1998	20	7.5	150	81.0	122
<b>1999</b>	<b>25</b>	<b>6.4</b>	<b>160</b>	<b>98.0</b>	<b>157</b>
<b>Maui</b>					
1995	30	7.3	220	103.5	228
1996	37	6.6	245	104.6	256
1997	45	7.8	350	102.5	359
1998	95	5.3	500	83.2	416
<b>1999</b>	<b>90</b>	<b>6.3</b>	<b>570</b>	<b>87.0</b>	<b>496</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

## SNAP BEANS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres<sup>1</sup></b>													
1995	6	8	10	15	11	11	11	13	12	13	11	11	120
1996	14	16	12	16	16	16	15	10	8	8	11	18	160
1997	10	12	16	12	9	14	14	12	12	11	17	18	130
1998	14	13	19	21	21	21	15	15	17	21	20	17	200
<b>1999</b>	<b>18</b>	<b>19</b>	<b>17</b>	<b>17</b>	<b>18</b>	<b>22</b>	<b>20</b>	<b>17</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>17</b>	<b>200</b>
<b>Production - 1,000 pounds</b>													
1995	40	36	45	53	52	48	52	51	38	42	43	40	540
1996	30	43	31	63	68	54	50	42	40	29	34	36	520
1997	26	48	49	71	54	69	69	59	67	59	65	64	700
1998	52	73	119	72	84	75	70	98	73	66	72	46	900
<b>1999</b>	<b>72</b>	<b>66</b>	<b>89</b>	<b>73</b>	<b>94</b>	<b>88</b>	<b>78</b>	<b>65</b>	<b>98</b>	<b>97</b>	<b>103</b>	<b>77</b>	<b>1,000</b>
<b>Farm price - cents per pound</b>													
1995	118.5	113.2	104.2	94.0	83.3	94.2	92.0	91.0	99.3	107.3	104.0	104.8	99.5
1996	110.0	117.2	120.1	106.9	76.7	69.3	78.0	96.7	100.7	110.7	102.5	110.7	97.0
1997	112.6	126.4	117.2	109.4	96.2	81.5	78.1	79.2	96.2	100.7	103.7	106.5	99.0
1998	112.8	85.8	74.9	76.8	86.4	75.1	67.5	57.4	86.9	91.5	86.6	115.9	82.0
<b>1999</b>	<b>100.2</b>	<b>103.6</b>	<b>93.4</b>	<b>101.1</b>	<b>84.0</b>	<b>66.2</b>	<b>77.8</b>	<b>85.6</b>	<b>83.4</b>	<b>80.7</b>	<b>87.3</b>	<b>102.3</b>	<b>88.0</b>

<sup>1</sup> Sum of monthly data exceeds total because harvest period longer than 1 month.

# CHINESE CABBAGE

## CHINESE CABBAGE: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	370	21.1	7,800	23.5	1,833
1996	410	18.8	7,700	23.5	1,810
1997	390	19.7	7,700	23.0	1,771
1998	380	20.8	7,900	19.0	1,501
<b>1999</b>	<b>330</b>	<b>22.7</b>	<b>7,500</b>	<b>19.0</b>	<b>1,425</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	260	21.5	5,600	23.7	1,327
1996	290	19.3	5,600	23.8	1,333
1997	270	20.0	5,400	23.0	1,242
1998	270	20.7	5,600	19.0	1,064
<b>1999</b>	<b>220</b>	<b>23.2</b>	<b>5,100</b>	<b>19.0</b>	<b>969</b>
<b>Honolulu/Kauai/Maui <sup>2</sup></b>					
1995	110	20.0	2,200	23.0	506
1996	120	15.8	2,100	22.7	477
1997	120	19.2	2,300	23.0	529
1998	110	20.9	2,300	19.0	437
<b>1999</b>	<b>110</b>	<b>21.8</b>	<b>2,400</b>	<b>19.0</b>	<b>456</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

## CHINESE CABBAGE: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	31	32	26	31	31	29	32	28	26	32	34	38	370
1996	38	42	46	38	27	29	31	32	43	30	29	25	410
1997	29	33	37	34	35	30	32	31	34	31	37	27	390
1998	34	39	35	31	32	29	33	28	32	32	28	27	380
<b>1999</b>	<b>30</b>	<b>33</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>27</b>	<b>30</b>	<b>26</b>	<b>26</b>	<b>21</b>	<b>22</b>	<b>28</b>	<b>330</b>
<b>Processing and fresh market:</b>													
<b>Production - 1,000 pounds</b>													
1995	672	712	800	808	638	658	475	567	557	599	594	720	7,800
1996	687	724	841	755	615	533	588	603	544	597	594	619	7,700
1997	578	664	738	794	747	575	571	569	515	599	714	636	7,700
1998	752	781	608	704	714	576	700	578	632	649	624	582	7,900
<b>1999</b>	<b>623</b>	<b>676</b>	<b>595</b>	<b>551</b>	<b>610</b>	<b>600</b>	<b>668</b>	<b>614</b>	<b>628</b>	<b>651</b>	<b>696</b>	<b>588</b>	<b>7,500</b>
<b>Farm price - cents per pound</b>													
1995	25.4	19.1	24.0	19.0	19.5	20.5	27.7	27.8	28.0	27.4	24.5	22.8	23.5
1996	21.4	19.8	19.2	18.5	19.2	22.5	25.5	24.9	26.6	27.9	29.8	31.2	23.5
1997	32.5	28.2	17.8	17.0	16.7	16.9	23.2	23.1	28.0	30.4	26.7	20.5	23.0
1998	23.7	17.7	15.6	16.7	15.7	16.2	19.6	20.0	22.0	17.8	19.6	23.2	19.0
<b>1999</b>	<b>22.2</b>	<b>17.1</b>	<b>15.0</b>	<b>16.2</b>	<b>18.2</b>	<b>18.9</b>	<b>18.4</b>	<b>20.1</b>	<b>22.6</b>	<b>19.4</b>	<b>20.9</b>	<b>18.4</b>	<b>19.0</b>

# HEAD CABBAGE

## HEAD CABBAGE: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	600	21.5	12,900	22.0	2,838
1996	640	22.0	14,100	18.5	2,609
1997	650	20.0	13,000	20.5	2,665
1998	600	25.5	15,300	18.0	2,754
<b>1999</b>	<b>550</b>	<b>26.0</b>	<b>14,300</b>	<b>18.0</b>	<b>2,574</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	230	21.3	4,900	21.5	1,054
1996	325	20.9	6,800	18.5	1,258
1997	350	18.0	6,300	20.4	1,285
1998	320	25.0	8,000	18.0	1,440
<b>1999</b>	<b>340</b>	<b>25.3</b>	<b>8,600</b>	<b>18.2</b>	<b>1,565</b>
<b>Maui</b>					
1995	370	21.6	8,000	22.3	1,784
1996	315	23.2	7,300	18.5	1,351
1997	300	22.3	6,700	20.6	1,380
1998	280	26.1	7,300	18.0	1,314
<b>1999</b>	<b>210</b>	<b>27.1</b>	<b>5,700</b>	<b>17.7</b>	<b>1,009</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

## HEAD CABBAGE: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	46	55	50	50	49	46	48	48	47	50	54	57	600
1996	56	52	58	51	53	58	57	53	53	50	47	52	640
1997	47	54	54	56	58	52	54	50	62	55	54	54	650
1998	54	52	56	50	50	48	50	49	47	48	48	48	600
<b>1999</b>	<b>49</b>	<b>56</b>	<b>50</b>	<b>48</b>	<b>44</b>	<b>42</b>	<b>41</b>	<b>41</b>	<b>42</b>	<b>44</b>	<b>47</b>	<b>46</b>	<b>550</b>
<b>Production - 1,000 pounds</b>													
1995	1,058	1,147	1,210	1,063	1,147	1,150	1,070	1,040	987	1,023	1,023	982	12,900
1996	1,241	1,218	1,422	1,257	1,300	1,191	1,239	1,167	1,040	1,055	1,037	933	14,100
1997	842	795	1,077	1,094	1,195	1,179	1,262	1,109	1,178	1,025	1,048	1,196	13,000
1998	1,126	1,256	1,272	1,240	1,404	1,234	1,314	1,266	1,338	1,384	1,249	1,217	15,300
<b>1999</b>	<b>1,223</b>	<b>1,221</b>	<b>1,518</b>	<b>1,135</b>	<b>1,118</b>	<b>1,016</b>	<b>1,112</b>	<b>1,124</b>	<b>1,193</b>	<b>1,295</b>	<b>1,162</b>	<b>1,183</b>	<b>14,300</b>
<b>Farm price - cents per pound</b>													
1995	25.4	22.6	21.4	20.6	20.9	18.8	20.9	22.6	24.6	22.6	23.3	21.1	22.0
1996	19.0	18.2	17.5	16.4	18.5	15.9	15.7	16.4	18.7	22.9	21.3	23.7	18.5
1997	24.5	25.9	21.1	19.0	17.5	16.0	16.6	23.6	20.5	22.5	24.2	18.7	20.5
1998	21.6	19.9	16.8	16.3	16.4	16.5	16.1	17.0	18.0	16.3	18.7	23.1	18.0
<b>1999</b>	<b>22.0</b>	<b>18.3</b>	<b>14.0</b>	<b>15.0</b>	<b>15.8</b>	<b>17.7</b>	<b>20.6</b>	<b>20.7</b>	<b>19.1</b>	<b>16.8</b>	<b>20.7</b>	<b>16.8</b>	<b>18.0</b>

**CELERY: Acreage, yield, production, price, and value, by counties, 1995-99**

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	60	20.8	1,250	31.5	394
1996	55	20.9	1,150	29.0	334
1997	50	25.0	1,250	30.0	375
1998	50	26.0	1,300	28.0	364
<b>1999</b>	<b>50</b>	<b>26.0</b>	<b>1,300</b>	<b>29.0</b>	<b>377</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	40	21.8	870	31.7	276
1996	35	24.3	850	30.0	255
1997	30	29.3	880	31.0	273
1998	30	27.7	830	29.4	244
<b>1999</b>	<b>25</b>	<b>32.0</b>	<b>800</b>	<b>31.5</b>	<b>252</b>
<b>Maui</b>					
1995	20	19.0	380	31.1	118
1996	20	15.0	300	26.3	79
1997	20	18.5	370	27.5	102
1998	20	23.5	470	25.5	120
<b>1999</b>	<b>25</b>	<b>20.0</b>	<b>500</b>	<b>25.0</b>	<b>125</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

**CELERY: Acreage, production, and price, State of Hawaii, 1995-99**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	5	4	5	5	5	6	5	5	5	5	5	5	60
1996	4	4	5	6	5	5	5	4	3	5	4	5	55
1997	5	4	3	4	5	4	4	4	4	4	4	5	50
1998	4	4	5	4	5	4	4	4	4	4	4	4	50
<b>1999</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>50</b>
<b>Production - 1,000 pounds</b>													
1995	99	95	126	125	124	125	99	96	95	82	92	92	1,250
1996	91	94	111	119	128	97	93	84	69	82	90	92	1,150
1997	111	100	92	102	125	124	117	95	87	103	92	102	1,250
1998	96	108	112	125	130	112	113	123	99	99	95	88	1,300
<b>1999</b>	<b>107</b>	<b>105</b>	<b>102</b>	<b>106</b>	<b>108</b>	<b>99</b>	<b>99</b>	<b>103</b>	<b>116</b>	<b>109</b>	<b>125</b>	<b>121</b>	<b>1,300</b>
<b>Farm price - cents per pound</b>													
1995	32.3	32.3	32.3	31.7	31.7	32.6	31.0	29.3	30.2	31.1	32.0	30.6	31.5
1996	31.6	30.7	28.3	28.3	27.2	28.5	22.3	30.6	30.2	31.2	31.1	29.6	29.0
1997	30.5	29.6	31.1	30.2	29.8	28.1	29.3	30.1	30.4	30.8	31.1	29.6	30.0
1998	28.1	27.7	27.0	28.5	28.8	28.5	28.4	27.8	28.1	25.2	30.3	26.6	28.0
<b>1999</b>	<b>28.1</b>	<b>30.3</b>	<b>30.5</b>	<b>29.1</b>	<b>29.7</b>	<b>28.6</b>	<b>29.3</b>	<b>29.0</b>	<b>28.9</b>	<b>27.6</b>	<b>28.8</b>	<b>28.7</b>	<b>29.0</b>

# SWEET CORN

## SWEET CORN: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State<sup>1</sup></b>					
1995	390	3.3	1,300	53.0	689
1996	400	3.5	1,400	50.0	700
1997	420	3.1	1,300	54.0	702
1998	400	2.8	1,100	57.0	627
<b>1999</b>	<b>450</b>	<b>3.8</b>	<b>1,700</b>	<b>58.0</b>	<b>986</b>
<b>Counties:</b>					
<b>Hawaii/Kauai<sup>2</sup></b>					
1995	190	3.9	750	42.5	319
1996	155	3.4	525	48.2	253
1997	155	3.9	610	47.5	290
1998	120	3.4	410	49.6	203
<b>1999</b>	<b>180</b>	<b>4.6</b>	<b>830</b>	<b>52.3</b>	<b>434</b>
<b>Honolulu</b>					
1995	155	2.5	390	68.0	265
1996	195	3.5	690	48.2	333
1997	240	2.3	560	56.0	314
1998	240	2.2	520	59.0	307
<b>1999</b>	<b>215</b>	<b>2.9</b>	<b>630</b>	<b>62.0</b>	<b>391</b>
<b>Maui</b>					
1995	45	3.6	160	65.5	105
1996	50	3.7	185	61.5	114
1997	25	5.2	130	75.5	98
1998	40	4.3	170	69.0	117
<b>1999</b>	<b>55</b>	<b>4.4</b>	<b>240</b>	<b>67.0</b>	<b>161</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

## SWEET CORN: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	14	13	19	29	39	34	51	45	40	40	39	27	390
1996	21	20	21	25	33	38	51	50	41	38	38	24	400
1997	11	13	34	27	37	42	55	52	47	37	36	29	420
1998	20	19	20	42	37	44	54	39	32	32	38	23	400
<b>1999</b>	<b>15</b>	<b>14</b>	<b>30</b>	<b>30</b>	<b>31</b>	<b>46</b>	<b>52</b>	<b>51</b>	<b>38</b>	<b>47</b>	<b>49</b>	<b>47</b>	<b>450</b>
<b>Production - 1,000 pounds</b>													
1995	41	31	56	95	157	129	199	146	121	121	123	81	1,300
1996	47	46	58	48	82	128	262	226	198	148	98	59	1,400
1997	26	25	94	93	113	125	178	197	136	105	115	93	1,300
1998	65	58	54	149	107	97	129	97	96	81	104	63	1,100
<b>1999</b>	<b>32</b>	<b>20</b>	<b>88</b>	<b>90</b>	<b>132</b>	<b>198</b>	<b>202</b>	<b>212</b>	<b>153</b>	<b>201</b>	<b>159</b>	<b>213</b>	<b>1,700</b>
<b>Farm price - cents per pound</b>													
1995	49.7	50.0	43.1	50.9	55.4	53.2	50.1	52.9	55.2	56.1	56.4	54.5	53.0
1996	58.8	49.4	48.7	61.7	50.1	63.0	44.5	46.5	47.2	49.9	50.4	53.0	50.0
1997	47.3	48.4	47.0	55.8	53.6	63.4	49.7	60.5	57.0	53.6	48.4	47.4	54.0
1998	53.5	51.9	53.2	55.4	56.6	51.3	57.8	64.1	63.5	62.1	56.0	54.2	57.0
<b>1999</b>	<b>55.8</b>	<b>60.4</b>	<b>72.5</b>	<b>59.2</b>	<b>62.1</b>	<b>43.3</b>	<b>45.9</b>	<b>58.9</b>	<b>54.0</b>	<b>62.3</b>	<b>63.8</b>	<b>67.4</b>	<b>58.0</b>



## CUCUMBERS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	400	10.0	4,000	40.0	1,600
1996	400	12.0	4,800	43.0	2,064
1997	440	12.5	5,500	40.0	2,200
1998	480	12.5	6,000	42.0	2,520
<b>1999</b>	<b>470</b>	<b>12.3</b>	<b>5,800</b>	<b>43.0</b>	<b>2,494</b>
<b>Counties:</b>					
<b>Hawaii/Kauai <sup>2</sup></b>					
1995	75	19.3	1,450	34.4	499
1996	45	17.8	800	39.4	315
1997	55	14.5	800	38.4	307
1998	50	14.0	700	39.7	278
<b>1999</b>	<b>45</b>	<b>14.4</b>	<b>650</b>	<b>39.6</b>	<b>257</b>
<b>Honolulu</b>					
1995	255	6.5	1,650	46.0	759
1996	215	7.0	1,500	50.7	761
1997	230	9.1	2,100	50.5	1,061
1998	260	9.2	2,400	51.0	1,224
<b>1999</b>	<b>280</b>	<b>10.2</b>	<b>2,850</b>	<b>49.0</b>	<b>1,397</b>
<b>Maui</b>					
1995	70	12.9	900	38.0	342
1996	140	17.9	2,500	39.5	988
1997	155	16.8	2,600	32.0	832
1998	170	17.1	2,900	35.1	1,018
<b>1999</b>	<b>145</b>	<b>15.9</b>	<b>2,300</b>	<b>36.5</b>	<b>840</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

## CUCUMBERS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres <sup>1</sup></b>													
1995	31	26	28	38	42	34	29	31	37	40	46	51	400
1996	42	39	42	42	44	42	31	33	32	35	33	21	400
1997	17	23	36	38	40	39	41	45	48	42	43	41	440
1998	42	37	33	44	43	44	46	44	42	39	40	44	480
<b>1999</b>	<b>41</b>	<b>36</b>	<b>42</b>	<b>42</b>	<b>39</b>	<b>32</b>	<b>41</b>	<b>41</b>	<b>44</b>	<b>43</b>	<b>48</b>	<b>48</b>	<b>470</b>
<b>Production - 1,000 pounds</b>													
1995	484	186	164	427	524	386	269	191	402	255	410	302	4,000
1996	334	292	410	549	522	382	420	401	397	520	238	335	4,800
1997	305	356	340	460	447	564	476	525	689	511	442	385	5,500
1998	391	320	453	574	522	514	647	568	499	501	482	529	6,000
<b>1999</b>	<b>557</b>	<b>429</b>	<b>537</b>	<b>588</b>	<b>456</b>	<b>352</b>	<b>538</b>	<b>547</b>	<b>477</b>	<b>482</b>	<b>448</b>	<b>389</b>	<b>5,800</b>
<b>Farm price - cents per pound</b>													
1995	40.0	46.6	56.9	44.8	35.6	38.4	46.4	49.3	35.7	44.7	32.8	29.3	40.0
1996	50.8	48.8	56.6	48.7	40.7	32.7	34.2	34.4	37.3	41.2	45.9	48.5	43.0
1997	40.6	53.0	43.8	41.2	37.5	36.4	37.2	39.9	34.1	39.2	42.0	43.7	40.0
1998	48.4	45.0	52.5	39.9	46.2	38.1	35.9	38.4	38.1	39.9	40.2	46.9	42.0
<b>1999</b>	<b>47.0</b>	<b>49.2</b>	<b>42.1</b>	<b>38.1</b>	<b>39.0</b>	<b>54.8</b>	<b>38.4</b>	<b>36.7</b>	<b>37.4</b>	<b>39.7</b>	<b>53.1</b>	<b>47.7</b>	<b>43.0</b>

<sup>1</sup> Sum of monthly data exceeds total because harvest period longer than 1 month.

## DAIKON: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	260	12.7	3,300	29.5	974
1996	280	11.8	3,300	28.5	941
1997	290	11.4	3,300	28.5	941
1998	300	10.0	3,000	31.5	945
<b>1999</b>	<b>300</b>	<b>9.0</b>	<b>2,700</b>	<b>28.0</b>	<b>756</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	165	10.3	1,700	27.5	468
1996	185	10.8	2,000	27.2	544
1997	190	10.5	2,000	27.5	550
1998	200	8.5	1,700	30.0	510
<b>1999</b>	<b>220</b>	<b>8.2</b>	<b>1,800</b>	<b>26.5</b>	<b>477</b>
<b>Honolulu/Kauai/Maui <sup>2</sup></b>					
1995	95	16.8	1,600	31.6	506
1996	95	13.7	1,300	30.5	397
1997	100	13.0	1,300	30.1	391
1998	100	13.0	1,300	33.5	435
<b>1999</b>	<b>80</b>	<b>11.3</b>	<b>900</b>	<b>31.0</b>	<b>279</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Maui combined with Honolulu to avoid disclosure of individual operations. Kauai combined with Honolulu and Maui beginning 1995.

## DAIKON: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	22	23	28	20	25	25	20	23	17	16	26	15	260
1996	26	16	25	21	20	23	21	28	26	29	22	23	280
1997	26	24	25	22	23	20	22	25	25	26	26	26	290
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													
<b>Processing and fresh market:</b>													
<b>Production - 1,000 pounds</b>													
1995	258	226	300	292	256	232	269	315	268	286	285	313	3,300
1996	313	275	273	262	247	216	282	311	273	259	273	316	3,300
1997	267	274	262	242	253	225	260	343	272	265	321	316	3,300
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													
<b>Farm price - cents per pound</b>													
1995	31.5	32.5	33.6	26.3	25.9	26.0	29.2	31.5	32.9	28.4	28.0	28.1	29.5
1996	29.3	29.3	26.2	26.1	26.6	26.5	27.6	29.1	29.7	28.6	30.7	31.2	28.5
1997	33.5	33.1	32.1	30.0	28.4	29.9	27.7	25.1	26.0	25.5	26.3	26.6	28.5
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													

<sup>1</sup> Data not shown separately beginning 1998.

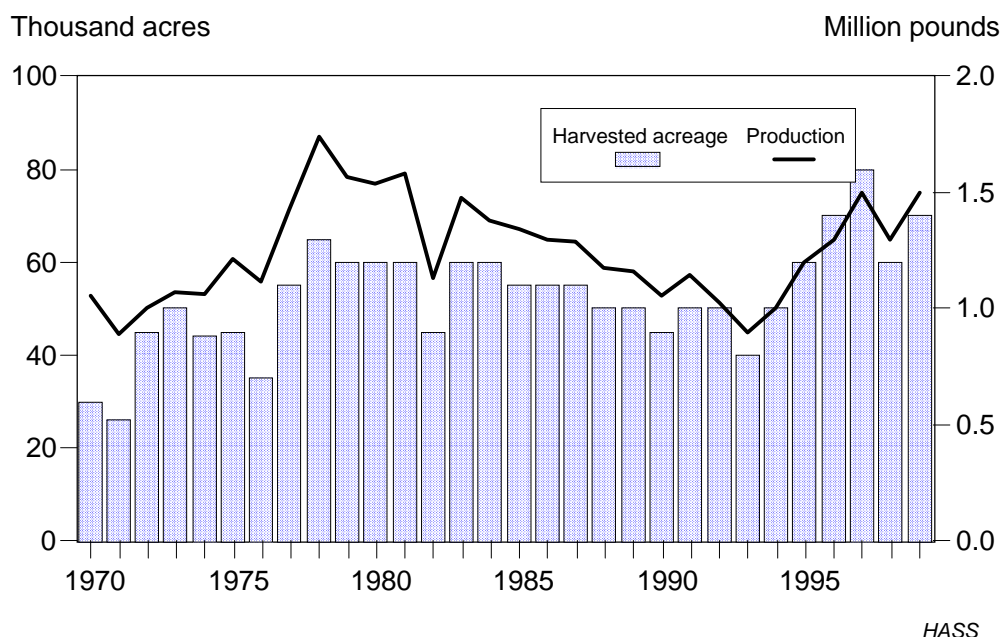
## EGGPLANT: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State<sup>1</sup></b>					
1995	60	20.0	1,200	82.0	984
1996	70	18.6	1,300	73.0	949
1997	80	18.8	1,500	79.0	1,185
1998	60	21.7	1,300	81.0	1,053
<b>1999</b>	<b>70</b>	<b>21.4</b>	<b>1,500</b>	<b>76.0</b>	<b>1,140</b>
<b>Counties:</b>					
<b>Hawaii/Kauai/Maui<sup>2</sup></b>					
1995	15	29.3	440	76.2	335
1996	25	24.0	600	67.2	403
1997	30	25.0	750	72.0	540
1998	15	30.0	450	75.1	338
<b>1999</b>	<b>20</b>	<b>20.0</b>	<b>400</b>	<b>70.0</b>	<b>280</b>
<b>Honolulu</b>					
1995	45	16.9	760	85.4	649
1996	45	15.6	700	78.0	546
1997	50	15.0	750	86.0	645
1998	45	18.9	850	84.1	715
<b>1999</b>	<b>50</b>	<b>22.0</b>	<b>1,100</b>	<b>78.2</b>	<b>860</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

## EGGPLANT: Acreage and Production, State of Hawaii, 1970-99



# LETTUCES

## LETTUCES (HEAD, SEMI-HEAD): Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	180	8.3	1,500	51.5	773
1996	180	8.3	1,500	47.0	705
1997	145	11.0	1,600	46.0	736
1998	170	10.0	1,700	48.0	816
<b>1999</b>	<b>170</b>	<b>8.8</b>	<b>1,500</b>	<b>49.0</b>	<b>735</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	120	7.3	875	51.0	446
1996	120	7.9	950	45.0	428
1997	90	12.6	1,130	44.5	503
1998	110	11.3	1,240	45.0	558
<b>1999</b>	<b>90</b>	<b>11.0</b>	<b>990</b>	<b>46.0</b>	<b>455</b>
<b>Honolulu/Kauai <sup>2</sup></b>					
1995	30	12.8	385	57.3	221
1996	35	10.0	350	56.3	197
1997	40	9.3	370	52.0	192
1998	45	9.0	405	57.8	234
<b>1999 <sup>3</sup></b>	<b>80</b>	<b>6.4</b>	<b>510</b>	<b>54.9</b>	<b>280</b>
<b>Maui</b>					
1995	30	8.0	240	44.0	106
1996	25	8.0	200	40.0	80
1997	15	6.7	100	41.0	41
1998	15	3.7	55	42.7	23
<b>1999 <sup>3</sup></b>					

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Honolulu to avoid disclosure of individual operations.

<sup>3</sup> Maui combined with Honolulu and Kauai to avoid disclosure of individual operations.

## LETTUCES (HEAD, SEMI-HEAD): Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	13	17	17	17	18	14	14	11	13	15	14	17	180
1996	19	18	18	17	13	17	12	15	16	13	10	12	180
1997	13	13	14	13	12	10	12	12	12	9	12	13	145
1998	14	17	14	17	14	14	15	14	13	13	12	13	170
<b>1999</b>	<b>10</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>13</b>	<b>15</b>	<b>12</b>	<b>16</b>	<b>14</b>	<b>170</b>
<b>Production - 1,000 pounds</b>													
1995	122	160	174	185	149	115	105	94	88	99	80	129	1,500
1996	178	156	127	149	143	108	126	99	109	125	87	93	1,500
1997	93	126	157	159	166	136	137	144	127	110	123	122	1,600
1998	139	150	153	216	167	131	143	129	119	114	111	128	1,700
<b>1999</b>	<b>118</b>	<b>120</b>	<b>150</b>	<b>147</b>	<b>164</b>	<b>134</b>	<b>146</b>	<b>127</b>	<b>98</b>	<b>94</b>	<b>102</b>	<b>100</b>	<b>1,500</b>
<b>Farm price - cents per pound</b>													
1995	53.7	44.2	45.8	58.0	58.2	55.2	53.6	54.3	55.2	53.4	46.6	41.3	51.5
1996	43.8	45.6	45.8	45.4	48.3	48.5	47.1	48.9	49.4	48.6	45.5	50.2	47.0
1997	49.1	46.8	44.8	42.5	42.4	45.9	44.1	44.6	46.8	49.6	49.2	50.1	46.0
1998	49.1	49.1	48.2	46.8	50.9	48.8	46.3	47.1	45.6	47.8	47.6	47.7	48.0
<b>1999</b>	<b>46.9</b>	<b>50.1</b>	<b>45.9</b>	<b>49.5</b>	<b>49.2</b>	<b>49.0</b>	<b>46.9</b>	<b>49.6</b>	<b>49.3</b>	<b>54.5</b>	<b>49.6</b>	<b>50.3</b>	<b>49.0</b>

# DRY ONIONS

## DRY ONIONS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	210	11.0	2,300	114.0	2,622
1996	210	9.5	2,000	118.0	2,360
1997	185	9.2	1,700	98.0	1,666
1998	270	13.0	3,500	73.0	2,555
<b>1999</b>	<b>310</b>	<b>11.0</b>	<b>3,400</b>	<b>67.0</b>	<b>2,278</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	5	7.0	35	100.0	35
1996	10	2.0	20	78.0	16
1997	5	2.0	10	80.0	8
1998	35	14.3	500	37.5	188
<b>1999</b>	<b>120</b>	<b>4.2</b>	<b>500</b>	<b>43.2</b>	<b>216</b>
<b>Maui</b>					
1995	205	11.0	2,265	114.2	2,587
1996	200	9.9	1,980	118.4	2,344
1997	180	9.4	1,690	98.1	1,658
1998	235	12.8	3,000	78.9	2,367
<b>1999</b>	<b>190</b>	<b>15.3</b>	<b>2,900</b>	<b>71.1</b>	<b>2,062</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

## DRY ONIONS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	15	16	14	28	22	16	18	16	8	12	21	24	210
1996	12	15	19	23	21	22	22	16	12	9	18	21	210
1997	6	3	14	16	19	22	32	18	16	11	14	14	185
1998	14	11	16	37	45	36	21	23	22	13	21	11	270
<b>1999</b>	<b>11</b>	<b>11</b>	<b>29</b>	<b>51</b>	<b>52</b>	<b>42</b>	<b>21</b>	<b>21</b>	<b>13</b>	<b>17</b>	<b>24</b>	<b>18</b>	<b>310</b>
<b>Production - 1,000 pounds</b>													
1995	190	162	152	184	180	200	190	183	166	209	241	243	2,300
1996	108	120	176	201	176	217	200	156	126	114	256	150	2,000
1997	48	17	135	189	203	140	285	133	178	102	134	136	1,700
1998	129	138	299	607	611	534	227	279	186	179	158	153	3,500
<b>1999</b>	<b>112</b>	<b>131</b>	<b>332</b>	<b>332</b>	<b>436</b>	<b>394</b>	<b>307</b>	<b>355</b>	<b>204</b>	<b>217</b>	<b>351</b>	<b>229</b>	<b>3,400</b>
<b>Farm price - cents per pound</b>													
1995	143.7	142.3	121.7	110.8	84.2	68.6	66.5	65.2	83.1	139.8	171.3	145.1	114.0
1996	126.4	145.3	140.9	133.7	100.3	77.3	76.7	84.2	130.9	141.9	147.6	133.1	118.0
1997	121.6	131.0	166.6	117.2	84.2	74.8	71.9	68.5	84.8	93.0	109.0	128.7	98.0
1998	143.4	142.9	142.2	76.7	45.2	37.5	39.3	49.7	48.2	70.0	110.7	122.6	73.0
<b>1999</b>	<b>129.5</b>	<b>134.8</b>	<b>110.5</b>	<b>65.6</b>	<b>42.3</b>	<b>34.6</b>	<b>36.4</b>	<b>51.6</b>	<b>67.5</b>	<b>71.7</b>	<b>75.6</b>	<b>86.0</b>	<b>67.0</b>

# GREEN ONIONS

## GREEN ONIONS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	220	6.8	1,500	96.0	1,440
1996	190	7.4	1,400	94.0	1,316
1997	155	9.0	1,400	96.0	1,344
1998	180	8.3	1,500	86.0	1,290
<b>1999</b>	<b>190</b>	<b>8.9</b>	<b>1,700</b>	<b>85.0</b>	<b>1,445</b>
<b>Counties:</b>					
<b>Hawaii/Kauai <sup>2</sup></b>					
1995	45	2.2	100	100.0	100
1996	35	3.3	115	97.0	112
1997	25	4.6	115	93.0	107
1998	25	5.0	125	90.5	113
<b>1999 <sup>3</sup></b>	<b>45</b>	<b>6.2</b>	<b>280</b>	<b>94.9</b>	<b>266</b>
<b>Honolulu</b>					
1995	160	7.8	1,250	93.5	1,169
1996	140	8.3	1,165	92.0	1,072
1997	120	9.8	1,180	95.4	1,126
1998	140	8.9	1,250	84.5	1,056
<b>1999</b>	<b>145</b>	<b>9.8</b>	<b>1,420</b>	<b>83.0</b>	<b>1,179</b>
<b>Maui</b>					
1995	15	10.0	150	114.0	171
1996	15	8.0	120	110.0	132
1997	10	10.5	105	106.0	111
1998	15	8.3	125	96.5	121
<b>1999 <sup>3</sup></b>					

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

<sup>3</sup> Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

## GREEN ONIONS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	18	19	18	19	19	18	18	19	17	18	19	18	220
1996	18	19	17	17	17	17	16	14	15	15	12	13	190
1997	9	11	11	10	11	13	15	14	16	14	15	16	155
1998	16	15	14	14	15	16	15	15	15	14	16	15	180
<b>1999</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>24</b>	<b>15</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>190</b>
<b>Production - 1,000 pounds</b>													
1995	116	111	113	99	122	128	128	141	128	142	134	138	1,500
1996	123	120	123	134	134	127	118	114	120	131	77	79	1,400
1997	89	106	111	122	124	123	122	114	126	122	118	123	1,400
1998	129	124	114	117	123	128	125	126	125	120	139	130	1,500
<b>1999</b>	<b>140</b>	<b>143</b>	<b>139</b>	<b>138</b>	<b>132</b>	<b>143</b>	<b>150</b>	<b>142</b>	<b>141</b>	<b>142</b>	<b>149</b>	<b>141</b>	<b>1,700</b>
<b>Farm price - cents per pound</b>													
1995	94.4	92.1	93.1	102.3	110.5	94.3	92.3	91.5	95.0	95.0	94.5	98.0	96.0
1996	105.3	105.8	99.3	90.5	86.0	88.3	86.6	86.2	87.5	87.6	99.7	115.4	94.0
1997	105.0	109.2	102.5	102.6	97.5	91.0	88.4	87.4	91.0	92.1	94.2	95.1	96.0
1998	91.3	88.0	90.2	95.8	89.2	86.6	79.2	79.0	76.5	82.1	85.5	88.7	86.0
<b>1999</b>	<b>86.5</b>	<b>85.8</b>	<b>87.0</b>	<b>83.9</b>	<b>79.8</b>	<b>78.8</b>	<b>88.3</b>	<b>87.4</b>	<b>84.9</b>	<b>85.5</b>	<b>85.3</b>	<b>86.0</b>	<b>85.0</b>

## GREEN PEPPERS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	200	12.0	2,400	58.0	1,392
1996	230	11.3	2,600	48.0	1,248
1997	200	10.0	2,000	49.0	980
1998	170	17.6	3,000	50.0	1,500
<b>1999</b>	<b>200</b>	<b>15.0</b>	<b>3,000</b>	<b>53.0</b>	<b>1,590</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	95	11.6	1,100	60.8	669
1996	215	11.3	2,440	47.9	1,169
1997	195	9.9	1,940	49.0	951
1998 <sup>3</sup>					
<b>1999 <sup>3</sup></b>					
<b>Maui</b>					
1995	105	12.4	1,300	55.6	723
1996	15	10.7	160	49.2	79
1997	5	12.0	60	50.8	30
1998 <sup>3</sup>					
<b>1999 <sup>3</sup></b>					

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

<sup>3</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

## GREEN PEPPERS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres <sup>1</sup></b>													
1995	16	17	21	20	18	18	15	18	14	20	18	21	200
1996	21	25	25	25	26	26	25	14	17	25	17	3	230
1997	21	17	16	10	13	10	20	19	25	21	20	22	200
1998	21	18	16	11	14	10	20	19	25	21	20	23	170
<b>1999</b>	<b>19</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>17</b>	<b>17</b>	<b>19</b>	<b>18</b>	<b>22</b>	<b>19</b>	<b>18</b>	<b>18</b>	<b>200</b>
<b>Production - 1,000 pounds</b>													
1995	230	251	132	150	191	216	145	153	193	171	255	313	2,400
1996	274	265	300	281	144	263	245	187	227	208	183	23	2,600
1997	57	22	145	106	206	232	268	260	144	112	199	249	2,000
1998	235	192	248	251	249	257	293	177	307	253	256	282	3,000
<b>1999</b>	<b>231</b>	<b>231</b>	<b>276</b>	<b>247</b>	<b>197</b>	<b>258</b>	<b>251</b>	<b>264</b>	<b>228</b>	<b>260</b>	<b>278</b>	<b>279</b>	<b>3,000</b>
<b>Farm price - cents per pound</b>													
1995	55.2	54.8	55.2	55.2	57.2	55.5	55.6	58.4	59.3	59.7	64.6	61.1	58.0
1996	48.0	47.6	50.1	50.2	48.3	47.7	47.9	44.5	45.2	43.6	51.7	71.1	48.0
1997	60.2	65.9	48.0	47.6	48.0	45.9	48.1	45.2	45.4	47.0	53.3	54.7	49.0
1998	54.2	57.8	51.0	49.6	58.6	47.0	51.4	43.5	46.5	45.6	47.8	48.6	50.0
<b>1999</b>	<b>46.2</b>	<b>44.0</b>	<b>46.1</b>	<b>54.7</b>	<b>58.1</b>	<b>55.3</b>	<b>60.5</b>	<b>48.5</b>	<b>46.5</b>	<b>51.6</b>	<b>62.9</b>	<b>59.4</b>	<b>53.0</b>

<sup>1</sup> Sum of monthly data exceeds total because harvest period longer than 1 month.

# SWEET POTATOES

## SWEET POTATOES: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	320	8.8	2,800	55.0	1,540
1996	280	8.9	2,500	52.0	1,300
1997	240	10.0	2,400	52.0	1,248
1998	190	10.0	1,900	56.0	1,064
<b>1999</b>	<b>340</b>	<b>8.5</b>	<b>2,900</b>	<b>63.0</b>	<b>1,827</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	165	7.9	1,300	55.7	724
1996	185	7.6	1,400	53.0	742
1997	170	9.4	1,600	51.0	816
1998	125	9.2	1,150	55.5	638
<b>1999</b>	<b>270</b>	<b>8.5</b>	<b>2,300</b>	<b>63.8</b>	<b>1,467</b>
<b>Maui</b>					
1995	155	9.7	1,500	54.4	816
1996	95	11.6	1,100	50.7	558
1997	70	11.4	800	54.0	432
1998	65	11.5	750	56.8	426
<b>1999</b>	<b>70</b>	<b>8.6</b>	<b>600</b>	<b>60.0</b>	<b>360</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Kauai combined with Hawaii (1989-1992) to avoid disclosure of individual operations. Honolulu combined with Hawaii and Kauai beginning 1993.

## SWEET POTATOES: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	21	20	20	17	26	26	27	27	30	36	38	32	320
1996	30	32	30	22	20	18	28	27	19	18	20	16	280
1997	22	22	20	21	17	18	19	19	20	22	22	18	240
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													
<b>Production - 1,000 pounds</b>													
1995	179	156	228	144	207	196	331	304	331	254	277	193	2,800
1996	217	166	252	174	262	179	259	247	209	211	173	151	2,500
1997	163	114	131	189	216	162	261	254	228	213	253	216	2,400
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													
<b>Farm price - cents per pound</b>													
1995	54.9	55.0	56.3	56.7	55.9	56.6	56.1	54.9	54.9	54.1	53.0	51.9	55.0
1996	51.8	51.9	51.7	51.2	51.4	51.0	51.7	51.1	51.4	51.8	53.2	57.7	52.0
1997	54.2	56.0	56.3	56.3	57.0	56.0	51.9	48.4	49.7	47.9	48.5	49.1	52.0
1998 <sup>1</sup>													
<b>1999 <sup>1</sup></b>													

<sup>1</sup> Data not shown separately beginning 1998.



**ROMAINE: Acreage, yield, production, price, and value, by counties, 1995-99**

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	185	9.2	1,700	45.0	765
1996	175	9.7	1,700	39.0	663
1997	165	11.5	1,900	39.0	741
1998	220	15.0	3,300	38.0	1,254
<b>1999</b>	<b>240</b>	<b>11.2</b>	<b>2,700</b>	<b>37.0</b>	<b>999</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu <sup>2</sup></b>					
1995	75	7.5	560	52.1	292
1996	90	8.2	740	43.5	322
1997	75	10.0	750	43.6	327
1998	110	12.7	1,400	43.4	608
<b>1999</b>	<b>145</b>	<b>11.0</b>	<b>1,600</b>	<b>40.4</b>	<b>646</b>
<b>Maui</b>					
1995	110	10.4	1,140	41.5	473
1996	85	11.3	960	35.5	341
1997	90	12.8	1,150	36.0	414
1998	110	17.3	1,900	34.0	646
<b>1999</b>	<b>95</b>	<b>11.6</b>	<b>1,100</b>	<b>32.0</b>	<b>352</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu combined with Hawaii to avoid disclosure of individual operations beginning 1995.

**ROMAINE: Acreage, production, and price, State of Hawaii, 1995-99**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres</b>													
1995	19	17	15	17	16	17	19	10	13	13	14	15	185
1996	15	21	21	21	17	13	12	11	11	12	10	11	175
1997	12	17	15	14	12	11	12	13	12	13	15	19	165
1998	22	24	22	19	17	19	16	15	17	15	16	18	220
<b>1999</b>	<b>21</b>	<b>23</b>	<b>27</b>	<b>27</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>13</b>	<b>11</b>	<b>14</b>	<b>13</b>	<b>240</b>
<b>Production - 1,000 pounds</b>													
1995	115	158	177	179	129	147	166	121	102	109	145	152	1,700
1996	130	148	228	226	179	148	128	98	113	108	95	99	1,700
1997	91	125	178	211	179	136	153	146	116	131	163	271	1,900
1998	313	325	305	352	290	269	232	259	259	215	252	229	3,300
<b>1999</b>	<b>312</b>	<b>264</b>	<b>348</b>	<b>324</b>	<b>239</b>	<b>250</b>	<b>196</b>	<b>153</b>	<b>124</b>	<b>160</b>	<b>179</b>	<b>151</b>	<b>2,700</b>
<b>Farm price - cents per pound</b>													
1995	48.8	42.0	42.8	54.2	62.3	42.7	38.9	41.5	44.4	48.3	39.6	37.1	45.0
1996	40.2	38.8	43.6	33.4	35.9	39.7	35.9	40.2	38.7	38.2	40.7	46.9	39.0
1997	46.9	43.6	38.4	34.8	42.2	34.8	39.9	34.9	40.2	44.1	44.8	33.4	39.0
1998	37.2	25.9	29.6	42.8	42.6	48.0	46.0	40.3	39.3	38.8	32.1	36.0	38.0
<b>1999</b>	<b>34.9</b>	<b>29.8</b>	<b>30.1</b>	<b>34.4</b>	<b>40.0</b>	<b>43.7</b>	<b>39.4</b>	<b>39.2</b>	<b>40.4</b>	<b>42.4</b>	<b>40.6</b>	<b>41.6</b>	<b>37.0</b>

# ITALIAN SQUASH

## ITALIAN SQUASH: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	75	8.3	620	51.0	316
1996	80	8.8	700	48.0	336
1997	200	7.0	1,400	50.0	700
1998	170	8.8	1,500	49.0	735
<b>1999</b>	<b>180</b>	<b>10.6</b>	<b>1,900</b>	<b>45.0</b>	<b>855</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	30	7.0	210	51.0	107
1996	45	7.1	320	48.5	155
1997	160	6.6	1,050	49.7	522
1998	120	8.6	1,030	48.5	500
<b>1999</b>	<b>110</b>	<b>10.5</b>	<b>1,150</b>	<b>45.3</b>	<b>521</b>
<b>Maui</b>					
1995	45	9.1	410	51.0	209
1996	35	10.9	380	47.5	181
1997	40	8.8	350	51.0	179
1998	50	9.4	470	50.0	235
<b>1999</b>	<b>70</b>	<b>10.7</b>	<b>750</b>	<b>44.5</b>	<b>334</b>

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

## TARO: Number of farms, acreage, marketings, price, and value, by counties, 1995-99

Year	Farms	Acreage in crop <sup>1</sup>			Marketings			Farm price			Value of sales
		Poi taro	Chinese taro	Total	Fresh	Processed	Total	Poi taro	Chinese taro	All	
<div><div>Number</div><div>----- Acres -----</div><div>----- 1,000 pounds -----</div><div>---- Cents per pound ----</div></div>											1,000 dollars
State											
1995	190	350	200	550	800	6,000	6,800	48.1	47.4	48.0	3,264
1996	180	350	180	530	500	5,200	5,700	49.6	45.8	49.0	2,793
1997	160	370	80	450	400	5,100	5,500	51.5	46.9	51.0	2,805
1998	180	400	90	490	300	5,700	6,000	53.0	53.0	53.0	3,180
1999	190	420	80	500	300	6,500	6,800	53.0	53.5	53.0	3,604
Counties:											
Hawaii											
1995	109	65	190	255	790	610	1,400	46.2	47.2	46.9	657
1996	100	60	170	230	490	910	1,400	56.0	44.7	49.2	689
1997	85	80	70	150	390	910	1,300	60.0	46.1	53.7	698
1998	100	90	70	160	250	850	1,100	61.0	53.0	57.0	627
1999	100	100	80	180	200	900	1,100	61.0	53.2	57.5	632
Honolulu/Maui <sup>2</sup>											
1995	29	75	<sup>3</sup> 10	85	10	1,230	1,240	49.1	64.0	49.2	610
1996	26	80	5	85	10	1,090	1,100	51.1	61.2	51.6	568
1997	25	80	5	85	10	890	900	49.5	90.0	50.0	450
1998	25	80	15	95	50	1,050	1,100	52.4	53.5	52.5	577
1999	25	90	*	90	100	1,300	1,400	52.4	54.9	52.6	736
Kauai											
1995	52	210	<sup>3</sup>	210	*	4,160	4,160	48.0	<sup>4</sup>	48.0	1,997
1996	54	210	5	215	*	3,200	3,200	48.0	<sup>4</sup>	48.0	1,536
1997	50	210	5	215	*	3,300	3,300	50.1	<sup>4</sup>	50.2	1,657
1998	55	230	5	235	*	3,800	3,800	52.0	<sup>4</sup>	52.0	1,976
1999	65	230	*	230	*	4,300	4,300	52.0	<sup>4</sup>	52.0	2,236

\* = Less than 5,000 pounds.

<sup>1</sup> Survey conducted in November each year. Does not include acreage used primarily for leaf production.<sup>2</sup> Maui combined with Honolulu to avoid disclosure of individual operations.<sup>3</sup> Kauai combined with Honolulu and Maui to avoid disclosure of individual operations.<sup>4</sup> Data not shown separately but accounted for in State average.

## TARO: Hawaii imports, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
<i>1,000 pounds</i>													
1995	43	44	49	54	62	60	43	33	26	17	14	24	469
1996	18	23	36	43	42	51	56	54	68	15	28	75	509
1997	39	28	46	46	66	44	39	21	25	41	37	51	493
1998 <sup>1</sup>													
<b>1999<sup>1</sup></b>													

<sup>1</sup> Data not available.

Source of inshipment data: Market Analysis and News Branch of the State Department of Agriculture.

# TOMATOES

## TOMATOES: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	240	25.0	6,000	48.5	2,910
1996	280	25.0	7,000	53.0	3,710
1997	340	30.0	10,200	54.0	5,508
1998	300	34.0	10,200	55.0	5,610
<b>1999</b>	<b>420</b>	<b>40.0</b>	<b>16,800</b>	<b>47.0</b>	<b>7,896</b>
<b>Counties:</b>					
<b>Hawaii/Honolulu/Kauai <sup>2</sup></b>					
1995	50	22.0	1,100	61.0	671
1996	65	21.8	1,420	67.5	959
1997	95	22.4	2,130	67.8	1,444
1998	145	30.3	4,400	61.2	2,693
<b>1999 <sup>3</sup></b>					
<b>Maui</b>					
1995	190	25.8	4,900	45.7	2,239
1996	215	26.0	5,580	49.3	2,751
1997	245	32.9	8,070	50.4	4,064
1998	155	37.4	5,800	50.3	2,917
<b>1999 <sup>3</sup></b>					

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

<sup>2</sup> Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations beginning 1994.

<sup>3</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

## TOMATOES: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres <sup>1</sup></b>													
1995	28	22	20	18	19	23	26	22	23	21	23	28	240
1996	36	13	31	36	31	34	24	21	22	22	39	37	280
1997	36	33	37	35	32	29	32	26	36	28	40	40	340
1998	44	43	46	40	30	22	13	11	9	25	57	46	300
<b>1999</b>	<b>48</b>	<b>48</b>	<b>38</b>	<b>37</b>	<b>41</b>	<b>37</b>	<b>33</b>	<b>32</b>	<b>38</b>	<b>41</b>	<b>45</b>	<b>50</b>	<b>420</b>
<b>Production - 1,000 pounds</b>													
1995	510	473	541	395	712	726	571	524	265	294	435	554	6,000
1996	459	398	771	937	755	603	711	608	506	523	336	393	7,000
1997	610	770	835	1,190	1,281	885	906	482	532	592	949	1,168	10,200
1998	853	1,060	1,264	1,196	880	915	139	153	150	781	1,287	1,522	10,200
<b>1999</b>	<b>1,413</b>	<b>1,493</b>	<b>1,599</b>	<b>1,423</b>	<b>1,386</b>	<b>1,650</b>	<b>1,339</b>	<b>1,582</b>	<b>1,007</b>	<b>1,436</b>	<b>1,182</b>	<b>1,290</b>	<b>16,800</b>
<b>Farm price - cents per pound</b>													
1995	58.0	53.6	50.5	51.5	46.6	45.7	49.3	37.0	40.8	38.7	41.7	61.8	48.5
1996	48.7	46.7	73.6	75.5	56.5	42.7	36.2	37.0	39.2	47.6	52.6	60.4	53.0
1997	52.8	58.7	65.8	59.4	49.1	50.5	45.1	48.3	52.8	44.7	58.0	57.3	54.0
1998	51.4	47.7	54.9	51.6	57.9	48.2	65.0	75.2	73.8	58.2	57.5	58.5	55.0
<b>1999</b>	<b>56.6</b>	<b>45.1</b>	<b>42.1</b>	<b>48.7</b>	<b>51.4</b>	<b>50.1</b>	<b>43.3</b>	<b>39.1</b>	<b>48.5</b>	<b>38.3</b>	<b>51.9</b>	<b>52.0</b>	<b>47.0</b>

<sup>1</sup> Sum of monthly data exceeds total because harvest period longer than 1 month.

# WATERMELONS

## WATERMELONS: Acreage, yield, production, price, and value, by counties, 1995-99

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
<b>State <sup>1</sup></b>					
1995	800	25.5	20,400	17.0	3,468
1996	760	22.5	17,100	16.5	2,822
1997	840	20.0	16,800	18.0	3,024
1998	790	20.0	15,800	21.0	3,318
<b>1999</b>	<b>570</b>	<b>20.0</b>	<b>11,400</b>	<b>21.0</b>	<b>2,394</b>
<b>Counties:</b>					
<b>Hawaii/Kauai <sup>2</sup></b>					
1995	15	10.0	150	28.4	43
1996	10	7.0	70	34.6	24
1997	10	10.5	105	33.4	35
1998	5	14.0	70	21.0	15
<b>1999 <sup>3</sup></b>	<b>10</b>	<b>20.0</b>	<b>200</b>	<b>21.2</b>	<b>42</b>
<b>Honolulu</b>					
1995	425	24.2	10,300	17.7	1,823
1996	690	22.1	15,280	16.5	2,521
1997	825	20.1	16,600	17.9	2,971
1998	775	20.1	15,590	21.0	3,274
<b>1999</b>	<b>560</b>	<b>20.0</b>	<b>11,200</b>	<b>21.0</b>	<b>2,352</b>
<b>Maui</b>					
1995	360	27.6	9,950	16.1	1,602
1996	60	29.2	1,750	15.8	277
1997	5	19.0	95	18.9	18
1998	10	14.0	140	21.0	29
<b>1999 <sup>3</sup></b>					

<sup>1</sup> Sum of county estimates may not add to State total due to rounding. <sup>2</sup> Kauai combined with Hawaii to avoid disclosure of individual operations.

<sup>3</sup> Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

## WATERMELONS: Acreage, production, and price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
<b>Harvested acres <sup>1</sup></b>													
1995	0	0	0	10	78	148	123	161	131	99	33	21	800
1996	14	8	7	22	75	141	191	214	55	41	16	0	760
1997	0	*	*	31	180	170	184	145	133	42	12	0	840
1998	*	0	0	37	85	143	173	160	125	60	16	*	790
<b>1999</b>	<b>*</b>	<b>3</b>	<b>6</b>	<b>23</b>	<b>149</b>	<b>132</b>	<b>83</b>	<b>72</b>	<b>55</b>	<b>35</b>	<b>12</b>	<b>*</b>	<b>570</b>
<b>Production - 1,000 pounds</b>													
1995	0	0	0	288	2,725	4,833	3,787	5,118	2,016	1,030	419	184	20,400
1996	110	60	88	110	3,575	4,200	3,055	4,365	717	692	128	0	17,100
1997	0	2	2	39	3,142	4,052	3,887	3,441	1,467	627	141	0	16,800
1998	*	0	0	900	2,207	2,530	3,075	3,886	2,518	570	114	*	15,800
<b>1999</b>	<b>66</b>	<b>42</b>	<b>44</b>	<b>523</b>	<b>2,147</b>	<b>2,040</b>	<b>1,662</b>	<b>2,206</b>	<b>1,827</b>	<b>785</b>	<b>50</b>	<b>8</b>	<b>11,400</b>
<b>Farm price - cents per pound</b>													
1995	0	0	0	35.0	15.0	15.2	16.6	15.8	17.9	25.4	25.7	34.4	17.0
1996	33.6	33.7	33.7	31.7	17.5	14.8	15.2	15.3	16.3	25.7	25.8	0	16.5
1997	0	22.8	22.8	27.4	22.0	16.0	16.5	16.4	19.1	24.6	25.2	0	18.0
1998	0	0	0	32.7	26.3	20.8	18.7	19.0	17.8	21.6	23.6	0	21.0
<b>1999</b>	<b>18.8</b>	<b>25.1</b>	<b>27.6</b>	<b>30.4</b>	<b>25.8</b>	<b>20.8</b>	<b>18.4</b>	<b>18.2</b>	<b>17.0</b>	<b>23.9</b>	<b>29.1</b>	<b>25.0</b>	<b>21.0</b>

\* = Less than minimum amount to be estimated.

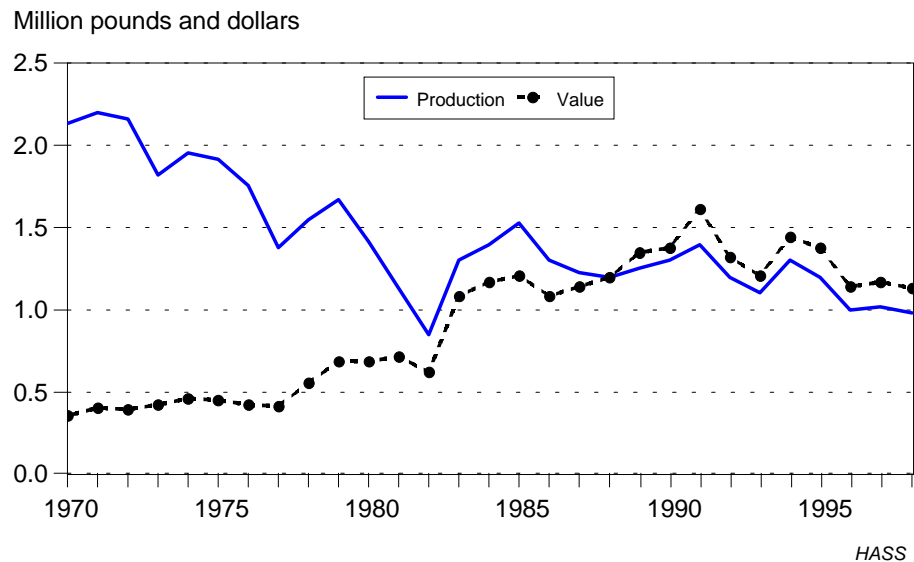
<sup>1</sup> Sum of monthly data exceeds total because harvest period longer than 1 month.

# PROCESSED CHINESE CABBAGE AND DAIKON, WATERCRESS

## PROCESSED CHINESE CABBAGE AND DAIKON: Quantity processed, price, and value, State of Hawaii, 1995-99

Year	Chinese cabbage			Daikon		
	Quantity processed	Farm price	Value of sales	Quantity processed	Farm price	Value of sales
	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1995	1,230	29.0	357	520	26.5	138
1996	1,250	29.0	363	500	27.0	135
1997	1,200	23.0	276	700	27.5	192
1998	1,200	19.0	228	550	30.5	168
<b>1999</b>	<b>1,100</b>	<b>19.0</b>	<b>209</b>	<b>400</b>	<b>27.7</b>	<b>111</b>

## WATERCRESS: Production and Farm Value, State of Hawaii, 1970-98



## WATERCRESS: Acreage, production, price, and value, State of Hawaii, 1995-99

Year	Acreage in crop	Production	Farm price	Value of sales
	<i>Acres</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1995	40	1,200	115.0	1,380
1996	35	1,000	114.0	1,140
1997	35	1,020	115.0	1,173
1998	35	980	115.0	1,127
<b>1999</b>	<b>35</b>	<b>970</b>	<b>115.0</b>	<b>1,116</b>

# **1999 CATTLE, MILK, AND HOG HIGHLIGHTS**

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## **CATTLE**

Cattle marketings, during 1999, totaled 37.7 million pounds, live weight. The 6 percent decrease in marketings from 1998 was the result of lighter animals shipped to market because of the prolonged dry conditions. Exports, which accounted for about three-quarters of all cattle marketed, increased 27 percent from 1998 to 56,000 head. The majority of animals exported were calves weighing less than 500 pounds. Local commercial slaughter declined 4 percent to 17,500 head. The annual average price for all cattle and calves increased to \$44.10 per hundredweight due in part to a larger proportion of exported cattle and calves at higher average prices. Cash receipts for 1999 totaled \$16.6 million, a decrease of 2 percent from 1998. The inventory of cattle and calves on Hawaii's ranches totaled 164,000 head on January 1, 2000. This was 5 percent and 9 percent below the January 1 inventory for 1999 and 1998, respectively. The island of Hawaii, which accounts for nearly 70 percent of the State's total, recorded a 5 percent drop in inventory to 114,400 head. The prolonged dry conditions was the principal reason for the smaller inventory.

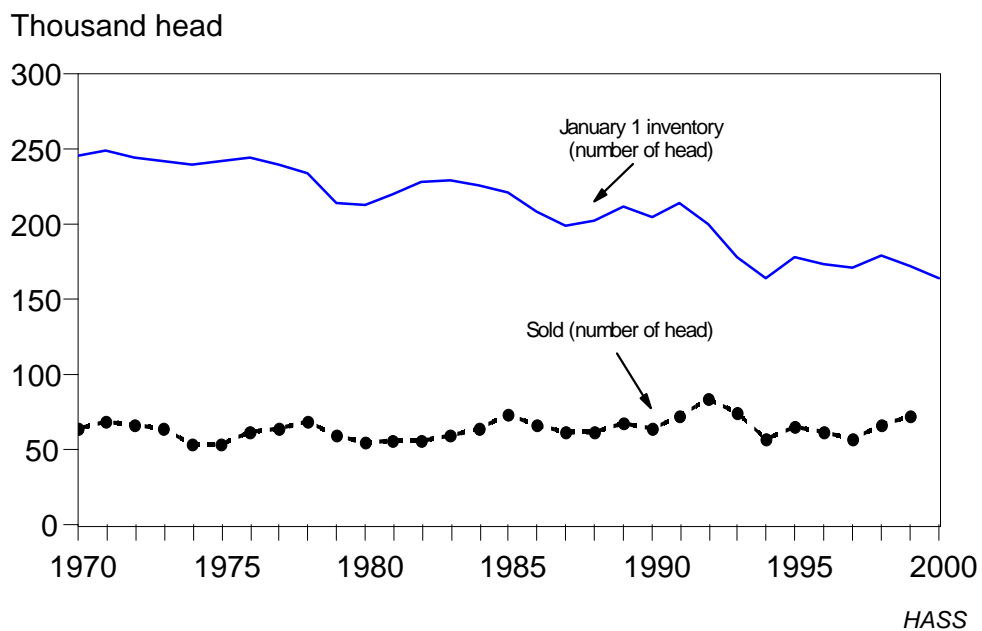
## **MILK**

Hawaii's dairy cows produced 119.7 million pounds of milk in 1999, compared with 129.0 million pounds in 1998 and the lowest amount in 39 years. Milk receipts to farmers totaled \$31.2 million, 6 percent less than 1998. The average price for milk delivered to the processors reached a record \$26.46 per hundredweight, a dime more than the previous year. The annual average output per cow was 13,919 pounds, down 575 pounds from 1998. The number of milk cows on hand averaged 8,600 head in 1999, down 300 from the previous year's average, and the fewest in 39 years.

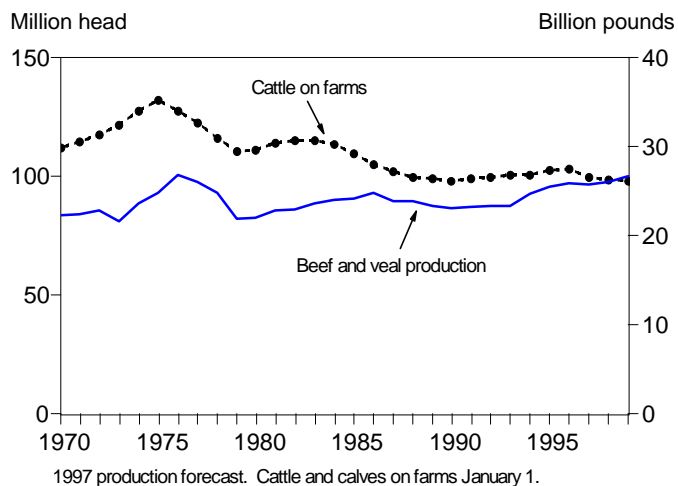
## **HOGS AND PIGS**

The number of hogs marketed and pork production for 1999 were unchanged from 1998 at 35,000 head and 6.3 million pounds, respectively. Cash receipts from the sales of hogs and pigs totaled \$5.1 million, a decrease of 3 percent from 1998. The total number of hogs and pigs in the State on December 1, 1999 was 28,000 head, 1,000 head fewer than during both 1998 and 1997. The island of Oahu, which accounts for almost two-thirds of the State's inventory, had 18,400 head of hogs and pigs on hand.

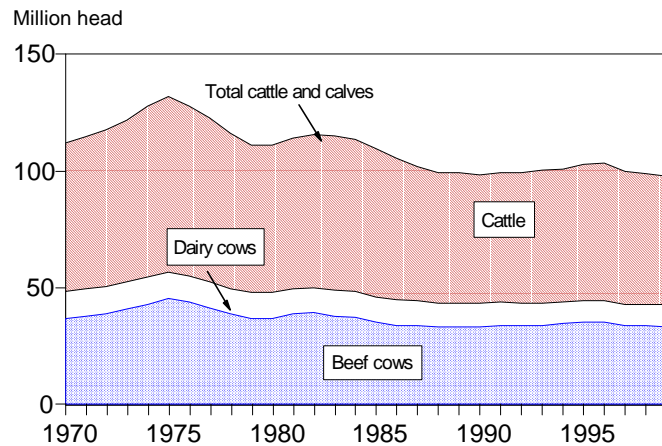
## Cattle Inventory and Marketings, State of Hawaii, 1970-99



### U.S. Cattle Numbers and Beef Production



### U.S. Cattle on Farms





## CATTLE AND CALVES: January 1 inventory by sex classes and weight, by counties, 1996-2000

Year	All cattle and calves	All cows and heifers that have calved			Heifers 500 pounds and over				Steers 500 lbs. and over	Bulls 500 lbs. and over	Steers, heifers, and bulls under 500 lbs.
		Total	Beef cows	Milk cows	Total	Beef cow replacements	Milk cow replacements	Other			
1,000 head											
State <sup>1</sup>											
1996	174	91	81	10	27	15	4	8	7	5	44
1997	172	93	83	10	27	16	5	6	8	5	39
1998	180	97	88	9	28	16	4	8	10	5	40
1999	173	95	86	9	25	16	4	5	8	5	40
2000	164	93	84	9	24	14	4	6	8	4	35
Counties:											
Hawaii											
1996	121.2	63.4	61.7	1.7	17.0	11.2	1.0	4.8	4.5	3.6	32.7
1997	119.1	63.8	62.0	1.8	17.8	12.5	1.4	3.9	4.7	3.9	28.9
1998	124.9	67.6	65.4	2.2	18.2	11.6	.8	5.8	6.0	3.5	29.6
1999	119.8	65.8	63.9	1.9	16.1	11.8	1.1	3.2	5.1	3.5	29.3
2000	114.4	65.4	63.4	2.0	16.5	10.9	1.4	4.2	5.2	3.0	24.3
Honolulu											
1996	14.3	8.5	1.8	6.7	2.6	.3	2.0	.3	.3	.2	2.7
1997	13.1	7.7	1.4	6.3	2.7	.3	2.3	.1	.2	.2	2.3
1998	13.0	7.0	2.0	5.0	3.4	.9	2.3	.2	.3	.2	2.1
1999	13.4	7.2	2.0	5.2	3.2	.8	2.1	.3	.3	.2	2.5
2000	12.8	7.7	2.1	5.6	2.2	.4	1.6	.2	.2	.2	2.5
Kauai											
1996	11.2	4.7	4.2	.5	2.3	.8	.8	.7	1.1	.4	2.7
1997	11.3	4.8	4.2	.6	2.5	.9	.7	.9	1.1	.3	2.6
1998	11.4	5.0	4.4	.6	2.2	.9	.4	.9	1.5	.4	2.3
1999	10.6	4.9	4.2	.7	1.8	.8	.3	.7	1.1	.3	2.5
2000	10.5	4.9	4.1	.8	1.8	.7	.2	.9	1.1	.3	2.4
Maui											
1996	27.3	14.2	13.2	1.0	5.4	2.6	.4	2.1	1.4	.7	5.6
1997	28.5	16.7	15.8	.9	3.9	2.2	.5	1.2	1.8	.7	5.4
1998	30.7	17.6	16.6	1.0	4.1	2.4	.6	1.1	1.8	.8	6.4
1999	29.2	17.0	16.1	.9	4.2	2.4	.6	1.2	1.6	.7	5.7
2000	26.3	14.9	14.8	.1	3.5	2.1	.4	1.0	1.3	.5	6.1

<sup>1</sup> Sum of county estimates may not add to State total due to rounding.

# CATTLE

## CATTLE AND CALVES: Number of operations, number and pounds sold, price, and value, by counties, 1995-99

Year	Operations	Number sold <sup>1 2</sup>	Pounds sold (live weight) <sup>3</sup>	Farm price (live weight) <sup>4</sup>	Value of sales <sup>2</sup>
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
<b>State</b>					
1995	850	66	35,660	43.20	15,417
1996	850	62	38,510	34.20	13,175
1997	830	58	35,890	39.90	14,323
1998	830	67	40,060	42.10	16,861
<b>1999</b>	<b>800</b>	<b>73</b>	<b>37,680</b>	<b>44.10</b>	<b>16,607</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	460	47.7	23,195	43.00	9,976
1996	470	44.7	25,133	32.50	8,168
1997	480	42.7	24,362	39.60	9,658
1998	480	48.6	26,934	42.00	11,312
<b>1999</b>	<b>470</b>	<b>55.7</b>	<b>27,346</b>	<b>44.50</b>	<b>12,164</b>
<b>Honolulu</b>					
1995	60	2.9	2,820	33.50	944
1996	60	2.8	2,481	28.70	713
1997	50	2.3	1,911	30.40	581
1998	50	2.0	1,650	31.20	514
<b>1999</b>	<b>60</b>	<b>2.0</b>	<b>1,522</b>	<b>36.20</b>	<b>551</b>
<b>Kauai</b>					
1995	140	3.0	1,986	44.10	875
1996	130	2.8	2,203	39.40	869
1997	120	3.3	2,485	43.50	1,082
1998	120	4.0	3,035	45.90	1,394
<b>1999</b>	<b>100</b>	<b>3.3</b>	<b>2,272</b>	<b>45.20</b>	<b>1,027</b>
<b>Maui</b>					
1995	190	12.4	7,659	47.30	3,621
1996	190	11.7	8,693	39.40	3,425
1997	180	9.7	7,132	42.10	3,003
1998	180	12.4	8,441	43.10	3,641
<b>1999</b>	<b>170</b>	<b>12.0</b>	<b>6,540</b>	<b>43.80</b>	<b>2,865</b>

<sup>1</sup> Includes custom slaughter for home use on farms where produced and out-of-State sales of cattle and calves, but excludes inter-farm sales.

<sup>2</sup> Sum of county estimates may not add to State total due to rounding.

<sup>3</sup> Excludes custom slaughter for use on farms where produced.

<sup>4</sup> Prices are equivalent delivered slaughterhouse for sales on county of production and delivered shipper's dock for interisland and out-of-State sales.

## CATTLE: Number of cattle sold, pounds, price, and value, State of Hawaii, 1995-99

Year	Number sold <sup>1</sup>	Pounds sold (live weight) <sup>2</sup>	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1995	18	15,980	38.10	6,088
1996	28	24,570	34.90	8,575
1997	24	20,930	37.70	7,891
1998	27	23,660	37.30	8,825
<b>1999</b>	<b>21</b>	<b>17,400</b>	<b>36.00</b>	<b>6,264</b>

<sup>1</sup> Includes custom slaughter for home use on farms where produced and out-of-State sales of cattle and calves, but excludes inter-farm sales.

<sup>2</sup> Excludes custom slaughter for use on farms where produced.

## CATTLE: Number of calves sold, pounds, price, and value, State of Hawaii, 1995-99

Year	Number sold	Pounds sold (live weight)	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1995	48	19,680	47.40	9,328
1996	34	13,940	33.00	4,600
1997	34	14,960	43.00	6,433
1998	40	16,400	49.00	8,036
<b>1999</b>	<b>52</b>	<b>20,280</b>	<b>51.00</b>	<b>10,343</b>

## CATTLE AND CALVES: Inventory and disposition, State of Hawaii, 1995-99

Year	Inventory beginning January 1	Calf crop	Inshipments	Marketings	Farm slaughter	Deaths	Inventory January 1 following year
				<i>1,000 head</i>			
1995	178	74	*	66	1	11	174
1996	174	74	*	62	1	13	172
1997	172	77	*	58	1	10	180
1998	180	73	*	67	1	12	173
<b>1999</b>	<b>173</b>	<b>72</b>	<b>*</b>	<b>73</b>	<b>1</b>	<b>7</b>	<b>164</b>

\* = Less than 500.

## CATTLE AND CALVES: Exports, State of Hawaii, 1995-99

Year	Total	Cattle <sup>1</sup>	Calves <sup>2</sup>	Steers	Heifers
			<i>1,000 head</i>		
1995	50	2	48	35	15
1996	38	4	34	27	11
1997	39	5	34	25	14
1998	44	4	40	25	19
<b>1999</b>	<b>56</b>	<b>4</b>	<b>52</b>	<b>32</b>	<b>24</b>

<sup>1</sup> 500 pounds or more.

<sup>2</sup> 499 pounds or less.

# CATTLE

## CATTLE: Commercial slaughter and farm price, State of Hawaii, 1995-99<sup>1</sup>

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

### Number of head<sup>2</sup> - 1,000 head

1995	1.1	1.0	1.2	1.2	1.5	1.5	1.4	1.4	1.3	1.6	1.4	1.3	15.6
1996	1.4	1.5	1.4	1.3	1.4	1.3	1.8	1.6	1.5	1.2	1.4	1.6	17.3
1997	1.8	1.4	1.7	1.7	1.5	1.4	1.5	1.7	1.6	1.7	1.5	1.6	19.2
1998	1.6	1.7	1.7	1.6	1.5	1.5	1.7	1.4	1.5	1.5	1.2	1.2	18.2
<b>1999</b>	<b>1.2</b>	<b>1.3</b>	<b>1.5</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>	<b>1.8</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>17.5</b>

### Pounds slaughtered, dressed weight<sup>2,3</sup> - 1,000 pounds

1995	586	530	652	662	774	784	704	708	732	841	750	688	8,411
1996	754	810	800	726	770	680	962	855	777	641	735	866	9,376
1997	955	780	903	937	838	786	858	924	903	922	840	899	10,545
1998	861	897	945	872	808	821	892	782	806	822	673	684	9,862
<b>1999</b>	<b>674</b>	<b>662</b>	<b>766</b>	<b>712</b>	<b>706</b>	<b>768</b>	<b>784</b>	<b>915</b>	<b>742</b>	<b>733</b>	<b>732</b>	<b>753</b>	<b>8,946</b>

### Average farm price, dressed weight - cents per pound

1995	76.0	76.0	73.5	67.5	69.0	65.5	64.5	65.5	64.5	63.0	60.5	62.0	67.0
1996	69.5	63.5	67.5	63.5	63.0	66.5	60.0	67.0	63.5	65.0	66.5	63.0	65.0
1997	65.0	63.0	67.0	67.0	67.0	64.0	68.0	66.0	67.5	64.0	66.0	67.0	66.0
1998	67.0	65.0	63.5	64.5	64.0	64.5	61.5	66.0	62.5	64.0	65.5	63.5	64.5
<b>1999</b>	<b>63.5</b>	<b>63.5</b>	<b>62.5</b>	<b>64.0</b>	<b>63.5</b>	<b>63.5</b>	<b>62.5</b>	<b>61.5</b>	<b>60.5</b>	<b>61.0</b>	<b>60.5</b>	<b>60.5</b>	<b>62.0</b>

<sup>1</sup> Includes custom slaughter for home use.

<sup>2</sup> Sum of monthly estimates may not add to annual total due to rounding.

<sup>3</sup> To convert dressed weight to live weight, divide dressed weight by 0.549 or multiply by a factor of 1.8215.

## CATTLE: Local marketings and farm price, State of Hawaii, 1988-99<sup>1</sup>

Year	Steers and heifers			Cows		
	Marketings (dressed weight)	Average price		Marketings (dressed weight)	Average price	
		Live weight <sup>2</sup>	Dressed weight		Live weight <sup>2</sup>	Dressed weight
	1,000 pounds	----- Cents per pound -----		1,000 pounds	----- Cents per pound -----	
1988	26,105	49.2	89.5	4,389	33.2	60.5
1989	28,797	50.8	92.5	4,655	33.4	61.0
1990	23,820	51.3	93.5	4,371	34.2	62.5
1991	20,951	51.4	93.5	4,257	34.4	62.5
1992	15,354	49.9	91.0	5,065	33.7	61.5
1993	4,805	46.4	84.5	5,065	34.7	63.0
1994	3,818	47.6	87.0	4,478	32.9	60.0
1995	2,596	49.3	89.5	4,529	29.8	54.5
1996	3,777	47.3	86.0	5,486	27.5	50.0
1997	3,762	47.1	86.0	5,029	28.8	52.5
1998	4,337	45.6	83.0	6,282	27.2	49.5
<b>1999</b>	<b>2,980</b>	<b>44.8</b>	<b>81.5</b>	<b>4,620</b>	<b>27.6</b>	<b>50.0</b>

<sup>1</sup> Excludes out-of-State shipments.

<sup>2</sup> To convert live weight to dressed weight, divide live weight by 0.549 or multiply by a factor of 1.8215.

# EQUINE, HONEY, SHEEP

## EQUINE: January 1 inventory, number sold, and value, State of Hawaii, 1998-2000

Year	Inventory	Number sold	Value of Sales
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 dollars</i>
1998	7.0	0.4	800
1999	7.0	0.4	900
<b>2000<sup>1</sup></b>			

<sup>1</sup> Next survey 2002 Agricultural Census.

## HONEY: Number of operations, colonies, honey and beeswax production, price, and value, State of Hawaii, 1995-99

Year	Operations	Number of colonies	Yield per colony (honey)	Production		Average price <sup>1</sup>		Value of production	
				Honey (extracted)	Beeswax	Honey (extracted)	Beeswax	Honey (extracted)	Beeswax
	<i>Number</i>	<i>Thousands</i>	<i>Pounds</i>	<i>----- 1,000 pounds -----</i>		<i>----- Cents per pound -----</i>		<i>----- 1,000 dollars -----</i>	
1995	20	8	129	1,032	16	56	106	578	17
1996	25	8	155	1,240	18	81	217	1,004	39
1997	23	9	146	1,314	17	86	224	1,130	38
1998	29	8	118	944	15	75	173	708	26
<b>1999</b>	<b>28</b>	<b>8</b>	<b>80</b>	<b>640</b>	<b>15</b>	<b>78</b>	<b>173</b>	<b>499</b>	<b>26</b>

<sup>1</sup> Average of unprocessed bulk and processed packaged honey sold at wholesale and processed packaged honey sold at retail by farmers.

## SHEEP AND LAMBS: January 1 inventory by class, State of Hawaii, 1996-2000

Year	All sheep and lambs	Breeding				Market			Lamb crop
		Total	Ewes 1 year +	Rams 1 year +	Replacement lambs	Total	Lambs	Sheep	
1,000 head									
1996	22	16	11	4	1	6	4	2	6
1997	21	15	10	4	1	6	4	2	5
1998	23	16	11	4	1	7	5	2	5
1999	19	13	9	3	1	6	5	1	5
2000	18	13	9	3	1	5	4	1	5

# MILK

## MILK: Number of operations, number of milk cows, production, sales, price, and value, by counties, 1995-99

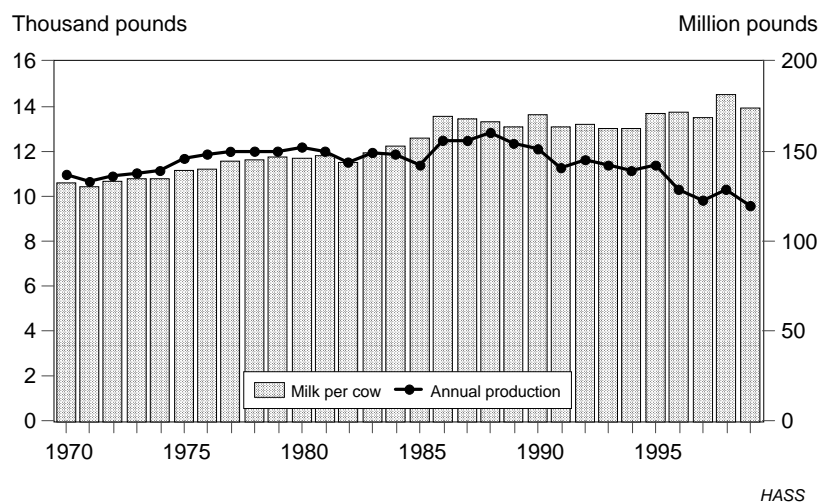
Year	Operations <sup>1</sup>	Annual average milk cows	Milk per cow	Production <sup>2</sup>	Sold <sup>2</sup>	Average price	Value of sales
	----- Number -----		Pounds	----- Million pounds -----		Dollars per hundredweight	1,000 dollars
<b>State</b>							
1995	60	10,400	13,654	142.0	139.4	23.06	32,146
1996	60	9,400	13,723	129.0	125.9	23.22	29,234
1997	50	9,100	13,516	123.0	119.3	24.71	29,479
1998	50	8,900	14,494	129.0	126.3	26.36	33,293
<b>1999</b>	<b>50</b>	<b>8,600</b>	<b>13,919</b>	<b>119.7</b>	<b>118.0</b>	<b>26.46</b>	<b>31,223</b>
<b>Counties:</b>							
<b>Hawaii/Kauai/Maui <sup>3</sup></b>							
1995	45	3,300	13,030	43.0	40.6	23.33	9,474
1996	45	3,300	13,758	45.4	42.9	23.55	10,104
1997	40	3,600	12,639	45.5	42.9	23.95	10,275
1998	40	3,800	12,868	48.9	46.5	24.63	11,455
<b>1999</b>	<b>40</b>	<b>2,900</b>	<b>11,655</b>	<b>33.8</b>	<b>32.3</b>	<b>24.60</b>	<b>7,947</b>
<b>Honolulu</b>							
1995	15	7,100	13,944	99.0	98.8	22.95	22,672
1996	15	6,100	13,705	83.6	83.0	23.05	19,130
1997	10	5,500	14,091	77.5	76.4	25.14	19,204
1998	10	5,100	15,706	80.1	79.8	27.37	21,838
<b>1999</b>	<b>10</b>	<b>5,700</b>	<b>15,070</b>	<b>85.9</b>	<b>85.7</b>	<b>27.16</b>	<b>23,276</b>

<sup>1</sup> Includes commercial, licensed dairies as well as farms with only a few cows.

<sup>2</sup> Difference between "Production" and "Sold" is milk used on farms for human consumption, fed to calves or other uses.

<sup>3</sup> Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

## MILK: Production and Milk per Cow Annual Basis, State of Hawaii, 1970-99



**MILK: Number of cows, milk production, price, and milk fat, State of Hawaii, 1995-99**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

**Average number of milk cows on hand during month - 1,000 head**

1995	10.4	10.4	10.5	10.7	10.6	10.4	10.2	10.2	10.3	10.3	10.4	10.2	10.4
1996	9.9	9.7	9.3	9.2	9.3	9.3	9.2	9.2	9.2	9.4	9.6	9.6	9.4
1997	9.6	9.4	9.4	9.1	9.1	9.0	9.0	9.0	8.8	8.8	8.9	8.9	9.1
1998	9.1	9.0	9.0	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.7	8.9
<b>1999</b>	<b>8.7</b>	<b>8.6</b>	<b>8.6</b>	<b>8.6</b>	<b>8.5</b>	<b>8.5</b>	<b>8.5</b>	<b>8.6</b>	<b>8.6</b>	<b>8.6</b>	<b>8.6</b>	<b>8.5</b>	<b>8.6</b>

**Average monthly production per all cows in herd - pounds**

1995	1,175	1,105	1,240	1,215	1,300	1,220	1,205	1,145	1,020	1,040	990	1,010	13,654
1996	1,120	1,105	1,245	1,250	1,270	1,215	1,260	1,165	1,045	990	960	1,105	13,723
1997	1,105	1,075	1,225	1,210	1,265	1,190	1,200	1,120	1,025	1,035	1,020	1,065	13,516
1998	1,100	1,110	1,280	1,325	1,400	1,320	1,350	1,215	1,100	1,125	1,090	1,150	14,494
<b>1999</b>	<b>1,150</b>	<b>1,095</b>	<b>1,280</b>	<b>1,255</b>	<b>1,295</b>	<b>1,260</b>	<b>1,260</b>	<b>1,200</b>	<b>1,080</b>	<b>1,035</b>	<b>1,000</b>	<b>1,060</b>	<b>13,919</b>

**Milk production - million pounds**

1995	12.2	11.5	13.0	13.0	13.8	12.7	12.3	11.7	10.5	10.7	10.3	10.3	142.0
1996	11.1	10.7	11.6	11.5	11.8	11.3	11.6	10.7	9.6	9.3	9.2	10.6	129.0
1997	10.6	10.1	11.5	11.0	11.5	10.7	10.8	10.1	9.0	9.1	9.1	9.5	123.0
1998	10.0	10.0	11.5	11.8	12.3	11.6	11.9	10.7	9.7	9.9	9.6	10.0	129.0
<b>1999</b>	<b>10.0</b>	<b>9.4</b>	<b>11.0</b>	<b>10.8</b>	<b>11.0</b>	<b>10.7</b>	<b>10.7</b>	<b>10.3</b>	<b>9.3</b>	<b>8.9</b>	<b>8.6</b>	<b>9.0</b>	<b>119.7</b>

**Average price for milk sold to plants - dollars per hundredweight**

1995	23.29	23.13	23.15	23.19	22.81	22.37	23.07	23.10	23.20	23.16	23.30	23.05	23.06
1996	23.05	23.09	23.12	23.07	23.08	23.12	23.18	23.39	23.40	23.48	23.49	23.36	23.22
1997	23.31	23.33	23.32	24.85	25.89	24.79	24.91	24.50	24.45	25.63	25.74	26.11	24.71
1998	25.93	26.08	26.09	26.11	26.04	24.49	25.12	26.72	26.60	27.77	27.87	28.32	26.36
<b>1999</b>	<b>28.41</b>	<b>29.21</b>	<b>28.82</b>	<b>25.12</b>	<b>25.24</b>	<b>25.31</b>	<b>25.12</b>	<b>25.42</b>	<b>25.57</b>	<b>27.72</b>	<b>26.88</b>	<b>25.03</b>	<b>26.46</b>

**Average milk fat for milk sold to plants - percent**

1995	3.42	3.42	3.41	3.41	3.38	3.33	3.34	3.36	3.39	3.40	3.48	3.49	3.40
1996	3.42	3.45	3.49	3.44	3.41	3.41	3.41	3.44	3.44	3.49	3.48	3.44	3.44
1997	3.41	3.41	3.38	3.46	3.40	3.35	3.39	3.41	3.42	3.46	3.45	3.48	3.42
1998	3.38	3.38	3.37	3.39	3.37	3.34	3.40	3.46	3.49	3.52	3.54	3.51	3.43
<b>1999</b>	<b>3.52</b>	<b>3.45</b>	<b>3.44</b>	<b>3.49</b>	<b>3.48</b>	<b>3.41</b>	<b>3.47</b>	<b>3.45</b>	<b>3.53</b>	<b>3.54</b>	<b>3.53</b>	<b>3.57</b>	<b>3.49</b>

# HOGS

## HOGS AND PIGS: December 1 inventory by classes and weight, State of Hawaii, 1995-99

Year	All hogs and pigs	Breeding	Market				
			Total	Under 60 lbs.	60-119 lbs.	120-179 lbs.	180 lbs. and over
1,000 head							
1995	34	6	28	13	7	6	2
1996	28	5	23	10	6	5	2
1997	29	5	24	11	6	5	2
1998	29	5	24	10	7	4	3
1999	28	5	23	9	7	4	3

## HOGS AND PIGS: December 1 inventory by class, by counties, 1995-99

Year	All hogs and pigs	Breeding	Total market	Year	All hogs and pigs	Breeding	Total market
<i>1,000 head</i>				<i>1,000 head</i>			
<b>Counties:</b>							
<b>Hawaii</b>				<b>Kauai</b>			
1995	2.1	.5	1.6	1995	3.7	.5	3.2
1996	2.6	.5	2.1	1996	4.0	.5	3.5
1997	2.2	.4	1.8	1997	3.5	.4	3.1
1998	2.1	.3	1.8	1998	3.5	.4	3.1
<b>1999</b>	<b>2.2</b>	<b>.5</b>	<b>1.7</b>	<b>1999</b>	<b>2.6</b>	<b>.3</b>	<b>2.3</b>
<b>Honolulu</b>				<b>Maui</b>			
1995	20.4	3.5	16.9	1995	7.8	1.2	6.6
1996	15.5	3.1	12.4	1996	5.9	1.0	4.9
1997	18.4	3.6	14.8	1997	4.9	.8	4.1
1998	18.3	3.3	15.0	1998	5.1	.8	4.3
<b>1999</b>	<b>18.4</b>	<b>3.4</b>	<b>15.0</b>	<b>1999</b>	<b>4.8</b>	<b>1.1</b>	<b>3.7</b>



**HOGS: Number of operations, number and pounds sold, price, and value,  
by counties, 1995-99**

Year	Operations	Number sold <sup>1</sup>	Pounds sold (live weight) <sup>2</sup>	Farm price (live weight)	Value of sales
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
<b>State<sup>3</sup></b>					
1995	300	47	8,225	80.20	6,596
1996	250	45	8,100	81.30	6,585
1997	250	33	6,105	80.30	4,902
1998	250	35	6,300	83.10	5,235
<b>1999</b>	<b>230</b>	<b>35</b>	<b>6,300</b>	<b>80.50</b>	<b>5,072</b>
<b>Counties:</b>					
<b>Hawaii</b>					
1995	70	3.4	597	77.00	460
1996	80	3.3	611	74.50	455
1997	90	2.7	525	77.00	404
1998	80	2.8	528	79.50	420
<b>1999</b>	<b>70</b>	<b>3.8</b>	<b>734</b>	<b>77.50</b>	<b>569</b>
<b>Honolulu</b>					
1995	120	26.1	4,433	79.50	3,524
1996	70	26.2	4,635	81.00	3,754
1997	70	20.7	3,795	80.00	3,036
1998	80	23.4	4,132	83.50	3,451
<b>1999</b>	<b>70</b>	<b>22.1</b>	<b>3,880</b>	<b>81.00</b>	<b>3,143</b>
<b>Kauai</b>					
1995	50	5.9	1,107	87.00	963
1996	40	5.8	1,040	84.50	879
1997	30	2.9	541	84.00	454
1998	40	3.5	634	85.00	539
<b>1999</b>	<b>30</b>	<b>3.5</b>	<b>575</b>	<b>81.00</b>	<b>466</b>
<b>Maui</b>					
1995	60	11.6	2,088	79.00	1,649
1996	60	9.7	1,814	82.50	1,497
1997	60	6.7	1,244	81.00	1,008
1998	50	5.3	1,006	82.00	825
<b>1999</b>	<b>60</b>	<b>5.6</b>	<b>1,111</b>	<b>80.50</b>	<b>894</b>

<sup>1</sup> Excludes interfarm sales; includes custom slaughter for home use; includes direct sales on farms to consumers.

<sup>2</sup> Excludes custom slaughter for use on farms where produced and interfarm sales.

<sup>3</sup> Sum of county estimates may not add to State total due to rounding. Sales and value data are for the 12-month period, December of the previous year through November of the following year.

# HOGS

## HOGS: Commercial slaughter and farm price, State of Hawaii, 1995-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
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### Number of head<sup>1 2</sup> - 1,000 head

1995	3.3	3.0	3.3	3.3	3.4	3.5	3.2	3.6	3.3	3.2	3.7	4.3	41.0
1996	3.4	3.5	3.5	3.7	3.7	3.4	3.9	3.8	3.3	3.6	3.4	4.3	43.4
1997	3.6	3.1	3.2	3.4	3.4	3.4	3.5	3.2	3.3	3.5	2.9	4.1	40.5
1998	3.3	2.8	3.0	3.1	3.1	3.1	3.3	2.9	2.2	3.1	2.8	3.7	36.5
<b>1999</b>	<b>2.8</b>	<b>2.9</b>	<b>3.0</b>	<b>3.1</b>	<b>2.9</b>	<b>3.0</b>	<b>3.1</b>	<b>2.9</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>3.6</b>	<b>36.0</b>

### Pounds slaughtered, dressed weight<sup>1 2 3</sup> - 1,000 pounds

1995	457	443	497	480	506	513	470	525	497	441	575	648	6,052
1996	503	497	503	519	507	486	562	527	496	501	500	612	6,213
1997	529	456	482	510	505	515	522	502	507	521	427	604	6,080
1998	491	419	455	470	472	452	504	440	336	465	434	540	5,477
<b>1999</b>	<b>437</b>	<b>422</b>	<b>459</b>	<b>464</b>	<b>429</b>	<b>458</b>	<b>488</b>	<b>465</b>	<b>454</b>	<b>456</b>	<b>443</b>	<b>552</b>	<b>5,525</b>

### All hogs, average farm price, dressed weight<sup>4</sup> - cents per pound

1995	106.0	106.0	106.0	107.0	106.5	106.5	107.5	107.5	108.5	107.5	108.0	107.0	107.0
1996	107.0	105.5	106.0	107.0	108.5	109.0	109.5	109.0	111.5	110.5	110.0	109.0	108.5
1997	108.5	107.0	107.0	104.5	103.0	104.0	107.0	106.5	109.0	109.5	107.5	110.5	107.0
1998	110.5	111.0	111.0	111.0	108.0	110.5	109.5	111.5	111.5	111.5	112.5	110.5	111.0
<b>1999</b>	<b>108.5</b>	<b>108.0</b>	<b>107.0</b>	<b>107.0</b>	<b>105.0</b>	<b>106.5</b>	<b>107.0</b>	<b>106.5</b>	<b>107.5</b>	<b>107.5</b>	<b>106.0</b>		<b>107.5</b>

### Market hogs, average farm price, dressed weight<sup>4</sup> - cents per pound

1995	108.0	107.5	108.0	108.5	108.5	108.5	108.5	109.5	110.0	109.0	109.0	109.5	108.5
1996	109.0	107.0	107.5	108.0	110.0	110.5	111.5	111.0	113.5	113.0	112.5	113.0	110.0
1997	112.5	109.5	112.0	109.5	110.5	112.5	112.0	111.5	111.0	112.5	112.5	112.5	111.5
1998	113.0	113.0	113.5	113.5	113.5	113.5	114.0	114.0	113.5	114.0	114.5	112.0	113.5
<b>1999</b>	<b>110.5</b>	<b>109.5</b>	<b>110.5</b>	<b>110.0</b>	<b>108.5</b>	<b>110.5</b>	<b>109.5</b>	<b>110.0</b>	<b>109.0</b>	<b>109.5</b>	<b>108.5</b>		<b>110.0</b>

<sup>1</sup> Excludes non-inspected farm slaughter; includes custom slaughter and live hog inshipments from the mainland for slaughter.

<sup>2</sup> Sum of monthly estimates may not add to annual total due to rounding.

<sup>3</sup> To convert dressed weight to live weight, divide dressed weight by 0.75 or multiply by a factor of 1.3333.

<sup>4</sup> Annual average price is for the 12-month period, December of the previous year through November of the following year.

## HOGS AND PIGS: Inventory and disposition, State of Hawaii, 1995-99

Year	Inventory December 1 previous year	Annual pig crop	Inshipments <sup>1</sup>	Marketings	Farm slaughter	Deaths	Inventory December 1
------	--	--------------------	--------------------------	------------	-------------------	--------	-------------------------

1,000 head

1995	35	51	*	47	1	4	34
1996	34	45	*	45	1	5	28
1997	28	39	*	33	1	4	29
1998	29	39	*	35	1	3	29
<b>1999</b>	<b>29</b>	<b>39</b>	<b>*</b>	<b>35</b>	<b>1</b>	<b>4</b>	<b>28</b>

\* = Less than 500 head.

<sup>1</sup> Excludes live hogs brought in for immediate slaughter.

# 1999 POULTRY AND EGG HIGHLIGHTS

Egg production for 1999 totaled 149.0 million eggs, 3 percent below 1998 production and the ninth consecutive year of decline. This was the lowest output since 1960. The average number of layers on hand during 1999 was 615,000, the lowest since 1960 and the eleventh consecutive year of decline. Cash receipts from the sale of eggs during 1999 totaled \$10.8 million, 4 percent below 1998. The total number of egg-type chickens on hand in Hawaii on December 1, 1999 was 721,000 birds, 3 percent below 1998 and the eighth year of decline.

## CHICKENS: December 1 inventory by class, by counties, 1995-99

Year	All chickens (excluding broilers)	Number of layers			Non-laying pullets		Other chickens (excluding broilers)
		Hens 1 year +	Pullets under 1 year	Total	Over 3 months	Under 3 months	
Thousands							
State							
1995	933	446	328	774	68	91	*
1996	876	490	235	725	76	75	*
1997	863	465	263	728	55	80	*
1998	747	408	199	607	77	63	*
1999	721	404	184	588	70	63	*
Counties:							
Hawaii/Kauai/Maui <sup>1</sup>							
1995	177	108	57	165	7	5	*
1996	161	95	58	153	8	0	*
1997	150	80	64	144	6	0	*
1998	146	82	58	140	0	6	*
1999	153	92	56	148	0	5	*
Honolulu							
1995	756	338	271	609	61	86	*
1996	715	395	177	572	68	75	*
1997	713	385	199	584	49	80	*
1998	601	326	141	467	77	57	*
1999	568	312	128	440	70	58	*

\* = Less than 500.

<sup>1</sup> Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

# POULTRY

## EGGS: December 1 number of operations, number of layers, production, price, and value, by counties, 1995-99<sup>1</sup>

Year	Operations	Average number of layers	Average production per layer	Production <sup>2</sup>	Average price <sup>3</sup>	Value of sales
	<i>Number</i>	<i>1,000 birds</i>	<i>Eggs</i>	<i>Million eggs</i>	<i>Cents per dozen</i>	<i>1,000 dollars</i>
<b>State<sup>4</sup></b>						
1995	55	777	239	186.0	87.2	13,516
1996	55	754	237	179.0	86.9	12,963
1997	55	724	238	172.0	90.6	12,986
1998	55	632	244	154.4	87.2	11,220
<b>1999</b>	<b>55</b>	<b>615</b>	<b>242</b>	<b>149.0</b>	<b>87.0</b>	<b>10,803</b>
<b>Counties:</b>						
<b>Hawaii/Kauai/Maui<sup>5</sup></b>						
1995	36	164	216	35.4	102.0	3,009
1996	36	156	229	35.8	102.5	3,058
1997	36	144	237	34.1	105.0	2,984
1998	38	140	245	34.6	105.0	3,027
<b>1999</b>	<b>40</b>	<b>143</b>	<b>240</b>	<b>34.4</b>	<b>104.0</b>	<b>2,982</b>
<b>Honolulu</b>						
1995	19	613	243	149.2	83.5	10,507
1996	19	598	241	144.3	83.0	9,905
1997	19	580	238	137.9	86.5	10,002
1998	17	492	244	119.8	82.1	8,193
<b>1999</b>	<b>15</b>	<b>472</b>	<b>243</b>	<b>114.6</b>	<b>81.9</b>	<b>7,821</b>

<sup>1</sup> Annual number of layers, egg production, sales, price, and value are for the 12-month period, December of the previous year through November of the following year.

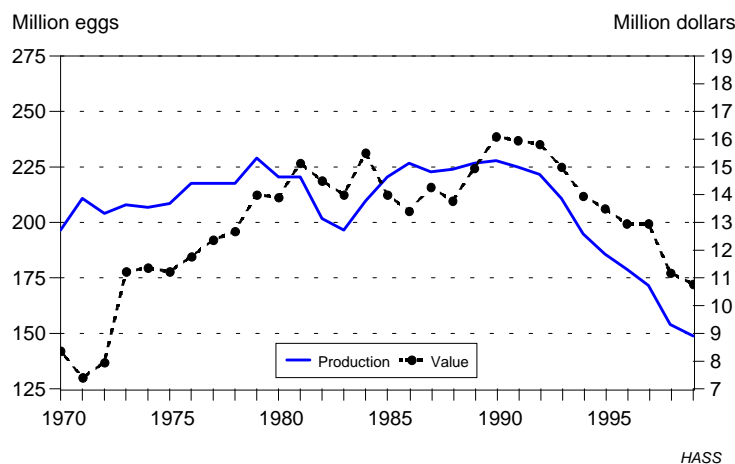
<sup>2</sup> Home consumption less than 0.5 million eggs included.

<sup>3</sup> Equivalent delivered processing plant.

<sup>4</sup> Sum of county estimates may not add to State total due to rounding.

<sup>5</sup> Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

## EGGS: Production and Value of Sales, State of Hawaii, 1970-99



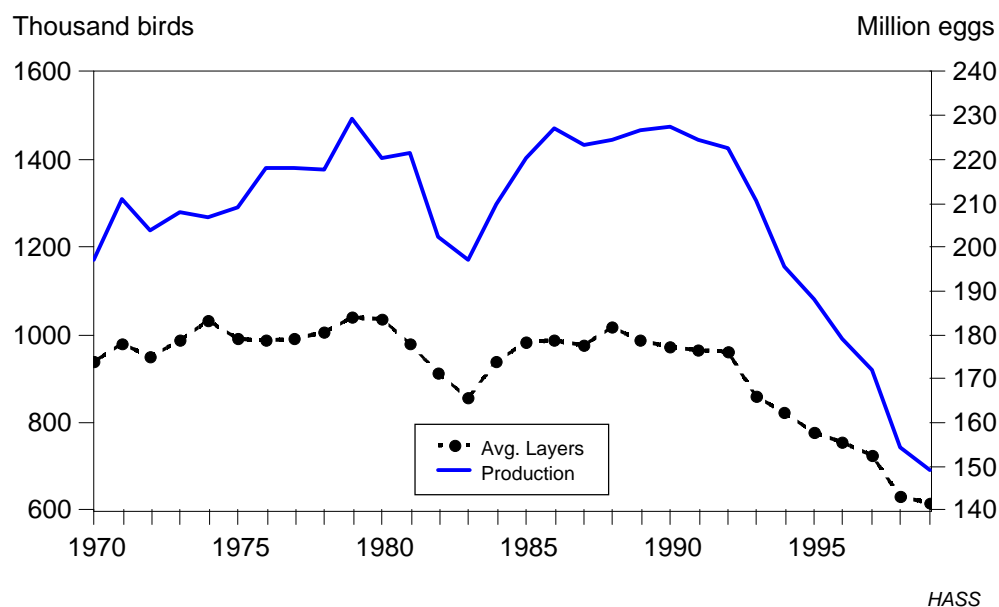
**EGGS: Number of layers, production, and price, State of Hawaii, 1995-99**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average <sup>1</sup>
<b>Average number of layers on hand during month - 1,000 layers</b>													
1995	794	776	768	758	760	769	781	784	770	776	780	782	777
1996	785	774	776	767	754	738	736	749	724	725	736	734	754
1997	737	723	736	733	719	725	708	711	711	716	732	715	724
1998	673	638	642	638	616	600	581	601	629	632	623	604	632
<b>1999</b>	<b>614</b>	<b>629</b>	<b>641</b>	<b>643</b>	<b>630</b>	<b>622</b>	<b>604</b>	<b>606</b>	<b>599</b>	<b>594</b>	<b>598</b>		<b>615</b>
<b>Egg production<sup>2</sup> - million eggs</b>													
1995	16.2	14.5	16.0	15.6	15.5	14.9	15.7	15.3	14.7	15.3	15.0	15.7	186.0
1996	15.8	15.1	16.2	15.0	14.7	14.2	14.4	14.4	14.4	15.1	15.1	15.5	179.0
1997	15.0	13.7	15.9	15.0	14.6	14.2	14.3	13.9	13.3	13.5	13.1	13.4	172.0
1998	13.5	12.0	13.3	12.8	13.2	12.7	12.6	13.0	12.7	12.7	12.5	12.8	154.4
<b>1999</b>	<b>12.7</b>	<b>11.8</b>	<b>13.3</b>	<b>13.1</b>	<b>13.1</b>	<b>12.5</b>	<b>12.2</b>	<b>11.9</b>	<b>11.9</b>	<b>12.1</b>	<b>11.6</b>		<b>149.0</b>
<b>Average farm price<sup>3</sup> - cents per dozen</b>													
1995	87.0	89.0	88.5	88.0	88.5	87.0	86.0	86.5	86.0	87.0	86.5	86.5	87.2
1996	87.5	87.5	87.5	86.0	86.0	86.0	86.0	86.5	86.0	87.0	89.5	91.5	86.9
1997	90.5	90.0	91.5	90.5	91.0	90.5	90.0	90.0	86.5	88.5	90.0	92.0	90.6
1998	92.0	93.0	93.5	91.5	85.5	83.0	83.0	84.5	82.0	82.0	83.5	88.0	87.2
<b>1999</b>	<b>86.5</b>	<b>88.0</b>	<b>87.0</b>	<b>87.5</b>	<b>88.5</b>	<b>86.5</b>	<b>87.5</b>	<b>84.0</b>	<b>87.0</b>	<b>87.5</b>	<b>85.5</b>		<b>87.0</b>

<sup>1</sup> Annual data are for the 12-month period, December of the previous year through November of the following year.

<sup>2</sup> Sum of monthly estimates may not add to annual total due to rounding.

<sup>3</sup> Equivalent delivered processing plant.

**CHICKENS: Production and Average Number of Layers, State of Hawaii, 1970-99**

## SPECIAL STATISTICS

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- AQUACULTURE
- AGRICULTURAL LABOR
- FERTILIZER CONSUMPTION

## AQUACULTURE: Number of operations, production, and value, by counties, 1995-99

Year	Number of operations	Production			Value				
		Shellfish <sup>1</sup>	Finfish	Algae	Shellfish	Finfish	Algae	Other <sup>2</sup>	Total
----- 1,000 pounds ----- 1,000 dollars -----									
State									
1995	107	414.6	125.2	869.8	3,462.4	769.5	8,685.9	388.7	13,306.5
1996	117	616.8	129.2	1,245.9	4,315.5	1,191.6	9,082.4	1,066.2	15,655.7
1997	110	NA	NA	NA	4,960.0	950.0	8,295.0	2,395.0	16,600.0
1998	105	700.4	218.0	1,324.7	4,959.9	958.0	8,294.9	2,406.9	16,619.7
1999	100	996.0	215.0	1,193.0	6,393.0	1,010.0	7,883.0	2,816.0	18,102.0
Counties:									
Hawaii									
1995	40	262.1	40.0	753.8	2,569.6	342.3	8,428.7	61.6	11,402.2
1996	43	432.8	66.6	1,113.1	3,188.7	764.9	8,779.1	464.6	13,197.3
1997	NA	NA	NA	NA <sub>3</sub>	NA	NA <sub>3</sub>	NA <sub>3</sub>	NA	13,380.0
1998	44	485.3	44.8		3,647.5			1,476.4	13,382.5
1999	42	475.0	86.0	1,022.0	3,513.0	562.0	7,473.0	1,829.0	13,377.0
Honolulu									
1995	38	112.5	75.1	116.0	652.6	389.0	257.2	326.4	1,625.2
1996	44	124.0	47.5	132.8	776.8	373.9	303.3	601.6	2,055.6
1997	NA	NA <sub>3</sub>	NA	NA <sub>3</sub>	NA	NA <sub>3</sub>	NA <sub>3</sub>	NA	2,120.0
1998	46		130.5		1,013.4			279.5	2,099.6
1999	44	222.0	114.0	<sub>3</sub>	1,370.0	408.0	<sub>3</sub>	241.0	2,333.0
Kauai									
1995	11	NA	NA	NA	NA	NA	NA	NA	NA
1996	11	NA	NA	NA	NA	NA	NA	NA	NA <sub>3</sub>
1997	NA	NA	NA <sub>3</sub>	NA	NA	NA <sub>3</sub>	NA	NA <sub>3</sub>	<sub>3</sub>
1998	3								
1999 <sup>3</sup>									
Maui									
1995	18	40.0	10.1	0	240.2	38.2	0	.7	279.1
1996	19	60.0	15.1	NA	350.0	52.8	NA	NA	402.8 <sub>3</sub>
1997	NA	NA <sub>3</sub>	NA <sub>3</sub>	NA <sub>3</sub>	NA <sub>3</sub>	NA <sub>3</sub>	NA <sub>3</sub>	NA <sub>3</sub>	<sub>3</sub>
1998	12								
1999	10	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>	<sub>3</sub>

NA = Not available.

<sup>1</sup> Some shellfish products sold by pieces, pounds not given.

<sup>2</sup> Non-food products: ornamental fish, seed stock, other. Items not sold by weight.

<sup>3</sup> Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

Source: 1995 and 1996, Hawaii State Department of Agriculture, Aquaculture Development Program.

# LABOR

## AGRICULTURAL LABOR: Workers on farms, annual and quarterly averages, State of Hawaii, 1995-99<sup>1</sup>

Year	Total farm employment			Hired workers by type of farm		
	Self-employed farm operators	Unpaid workers <sup>2</sup>	Hired workers <sup>3</sup>	Sugar	Pineapple	Other
1995	2,700	1,000	7,300	1,700	1,200	4,400
1996	2,700	1,000	7,400	1,400	1,200	4,800
1997	2,700	1,200	7,000	1,200	1,300	4,500
1998	2,700	1,200	7,400	1,200	1,200	5,000
<b>1999</b>	<b>3,000</b>	<b>1,200</b>	<b>7,600</b>	<b>1,200</b>	<b>1,300</b>	<b>5,200</b>
January	2,600	1,100	7,100	1,150	1,150	4,800
April	2,500	1,100	6,900	1,200	1,200	4,500
July	3,500	1,200	8,000	1,200	1,450	5,350
October	3,400	1,200	8,400	1,050	1,250	6,100

<sup>1</sup> Averages are based on data collected from the January, April, July, and October surveys.

<sup>2</sup> Includes family members and others working 15 or more hours per week.

<sup>3</sup> Sum of hired workers by type of farm may not add to hired workers total due to rounding.

## AGRICULTURAL LABOR: Annual average number of workers on farms, by counties, 1995-99<sup>1</sup>

Year	Self-employed farm operators	Unpaid workers <sup>2</sup>	Hired workers	Year	Self-employed farm operators	Unpaid workers <sup>2</sup>	Hired workers
<b>Counties:</b>							
<b>Hawaii</b>				<b>Kauai</b>			
1995	1,750	550	2,550	1995	200	150	1,000
1996	1,800	600	2,600	1996	200	100	1,000
1997	1,800	700	2,450	1997	200	100	850
1998	1,750	650	2,550	1998	200	100	800
<b>1999</b>	<b>1,850</b>	<b>600</b>	<b>2,400</b>	<b>1999</b>	<b>250</b>	<b>100</b>	<b>900</b>
<b>Honolulu</b>				<b>Maui</b>			
1995	500	250	1,900	1995	300	100	1,850
1996	450	200	2,000	1996	300	150	1,850
1997	500	300	1,900	1997	300	100	1,850
1998	450	250	2,100	1998	350	150	1,950
<b>1999</b>	<b>500</b>	<b>300</b>	<b>2,100</b>	<b>1999</b>	<b>450</b>	<b>200</b>	<b>2,200</b>

<sup>1</sup> Averages are based on data collected from the January, April, July, and October surveys.

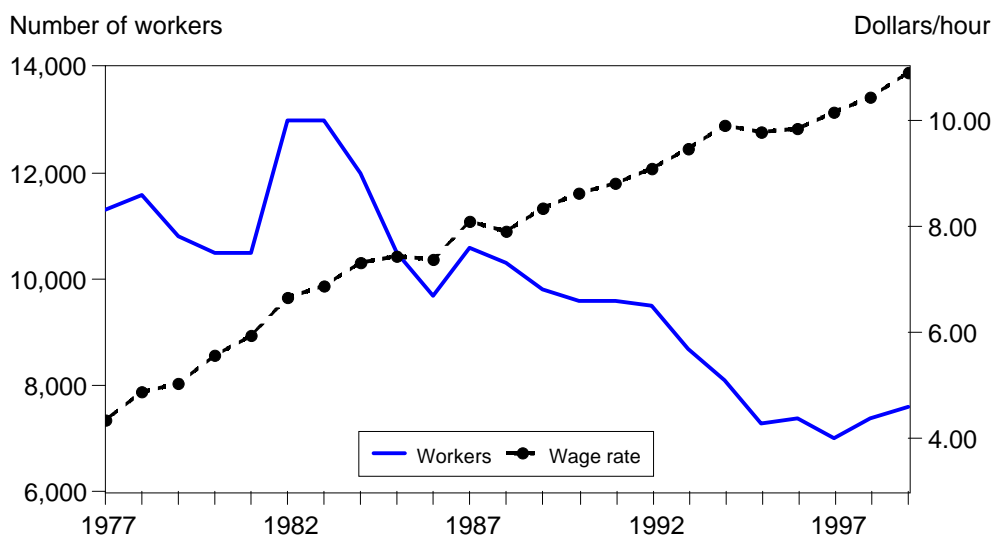
<sup>2</sup> Includes family members and others working 15 or more hours per week.



**AGRICULTURAL LABOR: Wage rates by type of work, annual and quarterly averages, State of Hawaii, 1995-99**

Year	Type of work performed			
	All farms		Farms with 1-9 workers	
	Field/livestock	All hired workers	Field/livestock	All hired workers
1995	8.60	9.76	7.08	7.72
1996	8.62	9.83	6.95	7.50
1997	8.83	10.15	6.82	7.65
1998	8.97	10.41	7.27	8.03
<b>1999</b>	<b>9.38</b>	<b>10.88</b>	<b>7.76</b>	<b>8.63</b>
January	9.35	10.80	7.68	8.67
April	9.38	10.93	7.57	7.80
July	9.53	10.88	8.17	8.61
October	9.24	10.91	7.51	9.19

**Hired Work Force and Average Wage Rate, State of Hawaii, 1977-99**



Number of workers is average of January, April, July, and October surveys, except 1981 January and April, 1982-83 July and 1984 July and October.

HASS

# FERTILIZER

## FERTILIZER: Commercial consumption, State of Hawaii, 1995-99

Type	Year ending June 30				
	1995	1996	1997	1998	1999

### Commercial fertilizers - Short tons

Total fertilizer	109,478	109,478	109,478	112,762	<b>98,103</b>
Total N	16,828	16,828	16,828	17,333	<b>15,080</b>
N in multi-nutrients	6,786	6,786	6,786	6,990	<b>6,081</b>
Total P <sub>2</sub> O <sub>5</sub>	5,719	5,719	5,719	5,890	<b>5,125</b>
P <sub>2</sub> O <sub>5</sub> in multi-nutrients	5,608	5,608	5,608	5,776	<b>5,025</b>
Total K <sub>2</sub> O	12,991	12,991	12,991	13,381	<b>11,641</b>
K <sub>2</sub> O in multi-nutrients	9,006	9,006	9,006	9,276	<b>8,071</b>
Total plant nutrients	35,538	35,538	35,538	36,604	<b>31,845</b>
Average analysis	33.7	33.7	33.7	33.7	<b>33.7</b>
Total in multi-nutrients	21,400	21,400	21,400	19,177	<b>19,177</b>

### Selected single-nutrient materials - Short tons of material

Nitrogen solutions	18,236	18,236	18,236	18,783	<b>16,341</b>
Urea	2,480	2,480	2,480	2,554	<b>2,222</b>
Ammonium sulfate	909	15,285	15,285	15,744	<b>13,697</b>
Concentrated superphosphate	172	172	172	178	<b>155</b>
Secondary and micronutrients	4,144	4,144	4,144	4,269	<b>3,714</b>
Potash materials (chloride)	494	494	494	509	<b>443</b>
Potash materials (sulfate)	845	845	845	870	<b>757</b>

### Consumption of fertilizers by class - Short tons of material

Total dry single-nutrient	28,423	28,423	28,423	29,275	<b>25,470</b>
Total dry multiple-nutrient	32,936	32,936	32,936	33,924	<b>29,514</b>
Fluid single-nutrient	25,583	25,583	25,583	26,350	<b>22,925</b>
Fluid multiple-nutrient	18,392	18,392	18,392	18,943	<b>16,481</b>
Total single-nutrient	54,005	54,005	54,005	55,625	<b>48,394</b>
Total multiple-nutrient	51,328	51,328	51,328	52,868	<b>45,995</b>

### Consumption of multiple-nutrient fertilizers - Short tons of material

N-P-K	45,031	45,031	45,031	46,382	<b>40,353</b>
N-P	6,297	6,297	6,297	6,485	<b>5,642</b>

Source: The Association of American Plant Food Control Officials.

## DEFINITION OF TERMS

**AGRICULTURE** entails all operations performed on a "farm" in connection with planting, growing, and harvesting of crops; raising and feeding of livestock and poultry, and management. All operations in connection with preparation of farm products for market where the preparation does not alter the form of the product and transportation to the first delivery point. In Hawaii, the first delivery point is defined as the processing plant or packinghouse door or other receivers' establishment for marketings on the island of production. For off-island marketings, the first delivery point is generally the shipper's warehouse.

**FARM** is a place with estimated (or expected) annual sales of agricultural products of at least \$1,000.

**CROP PRODUCTION** is the estimated amount of crop harvested and transferred at the first delivery point. Production estimates of vegetables and fruits include the quantity for fresh market and processing use.

**ACREAGE IN CROP** is the total acreage standing in a specific crop regardless of age or condition unless it has been declared abandoned by the operator.

**ACREAGE HARVESTED** is the total area harvested or partially harvested during the reporting period. A permanent or semi-permanent planting that was harvested for only a portion of the year is counted in its entirety. Acreage lost before maturity due to natural or economic factors is not included. Acreage harvested and planted repeatedly during the year is counted each time.

**YIELD** is the average production per acre of merchantable quality harvested and sold or utilized. This is derived by dividing total production by harvested acres.

**LIVESTOCK OPERATION** is defined as a place that has one or more head of the species on hand at any time during the year. It does not have to meet the definition of a farm.

**LIVESTOCK PRODUCTION** is the estimated amount of livestock and livestock products sold. This includes allowance for amount used on farms where produced.

**FARM PRICE** is a computed price to value agricultural production which may or may not reflect the average price at which actual transfer of ownership took place but which is comparable with the definition of "agriculture". See "agriculture" for the definition of pricing point.

**MARKET SUPPLY** includes pounds of product sold in Hawaii to both Armed Forces and civilians (outshipments excluded) plus products shipped in for civilian use. Direct inshipments to the Armed Forces are excluded.

## SAMPLING METHODS AND ESTIMATION

The Hawaii Agricultural Statistics Service uses a variety of sampling techniques to produce current agricultural statistics about crops, livestock, prices, farm labor, and other information relating to the agricultural economy.

Data is collected, summarized and estimates are prepared. These estimates then pass through the Agricultural Statistics Board of the U. S. Department of Agriculture where, for major items, Hawaii estimates become part of National totals and enter the official data base for agriculture. National and State estimates are published according to a schedule set one year in advance.

The Hawaii Agricultural Statistics Service conducts many of its surveys by virtually complete **ENUMERATION** of certain parts of the population. This is unusual compared to procedures in other states but is feasible in Hawaii due to the relatively small size of certain categories of the farm universe or the extreme concentration of ownership.

**LIST SAMPLING** is a common means of data collection. Lists of farm operators are well suited for the low cost collection of information by mail. Supplementary information is included within the frame that allows the use of efficient stratified sample designs. A major disadvantage of this method is the constant change in the list frame which can never be perfect. In Hawaii, cattle, hog, macadamia nut and coffee surveys are examples of stratified list sample designs.

**AREA FRAME SAMPLING** can be used alone or in conjunction with the list frame. The frame consists of an aggregation of identifiable units of land or segments which may be sampled. The frame is complete and does not suffer the type of deterioration over time as does a list frame.

**MULTIPLE-FRAME SAMPLING** is the use of two frames. It takes advantage of the best attributes of the area frame and the list frame, produces unbiased estimates and allows measurement of the sampling error.

**OBJECTIVE YIELD SURVEYS** provide information from direct counts, measurements and weights of the crop made from small plots in a probability selection of sample fields.

**ADMINISTRATIVE DATA** is used in addition to producer surveys to establish final production and marketings. These include processor receipts, slaughter, vacuum cooler volume, and inspections. Unloads at Honolulu and wholesale prices as reported by the Market Analysis and News Branch, are an important check data source.

# REPORTS

Title and Description	Release date
<b>CROPS</b>	
<b>AVOCADOS:</b> Annual summary of acreage, yield, production, farm price, and value . . . . .	May
<b>BANANAS:</b>	
- Monthly report on sales, farm price, and production forecast . . . . .	Last week of the month
- Annual summary of acreage, yield, production, farm price, and value . . . . .	May
<b>COFFEE:</b>	
- Preliminary season estimates of acreage, yield, production, farm price, and value . . . . .	December
- Final season estimates of acreage, yield, production, farm price, and value . . . . .	August
<b>FRUITS:</b>	
- Annual summary of fresh and processed fruit production, acreage, farm price, and value . . . . .	September
- Annual summary of tropical specialty fruits - acreage, production, and value . . . . .	August
<b>GINGER ROOT:</b> Annual summary of acreage, yield, production, farm price, and value. Planting intentions for next season . . . . .	August
<b>GUAVAS:</b> Annual summary of acreage, yield, production, farm price, and value . . . . .	June
<b>HERBS:</b> Annual summary of fresh production, farm price, and value . . . . .	August
<b>MACADAMIA NUTS:</b>	
- Preliminary season estimates of acreage, yield, production, farm price, and value . . . . .	January
- Final season estimates of acreage, yield, production, farm price, and value . . . . .	July
<b>PAPAYAS:</b> Data on acreage, utilization, and farm price . . . . .	Mid-month
<b>PINEAPPLES:</b> Annual summary of acreage, production, farm price, and value . . . . .	February
<b>SEED CROP:</b> Annual summary of acreage, outshipments of seed, and value . . . . .	October
<b>SUGARCANE:</b> Estimates of acreage and production for all major U.S. producing areas . . . . .	August-November
<b>TARO:</b>	
- Quarterly summary of taro milled for poi . . . . .	Jan., Apr., Jul., Oct.
- Annual estimates of acreage in crop, production, and farm prices for Chinese and wetland taro varieties . . . . .	January
<b>VEGETABLES:</b>	
- Monthly summary of acreage, sales, and farm price for selected major vegetables and melons. Includes forecast of production and harvested acreage . . . . .	Second week of month
- Annual summary of acreage, production, and value for all vegetables and melons . . . . .	May
<b>FLORICULTURE AND NURSERY PRODUCTS</b>	
<b>FLORICULTURE AND NURSERY PRODUCTS:</b> Annual summary of area, production, and value . . . . .	June
<b>POINSETTIAS:</b> Fall report of plant inventory and past year sales . . . . .	October
<b>LIVESTOCK</b>	
<b>LIVESTOCK REVIEW:</b> Monthly hog and cattle slaughter, cattle outshipment, pasture conditions, number of milk cows and milk production, number of layers and egg production, and farm prices . . . . .	Last week of month
<b>CATTLE:</b> Annual report of inventory and calf crop as of January 1 . . . . .	February
<b>HOGS:</b> Annual report of inventory and pig crop as of December 1 . . . . .	January
<b>HONEY:</b> Annual summary of colonies, production, yield, farm price, and value . . . . .	February
<b>OTHER PUBLICATIONS</b>	
<b>AQUACULTURE:</b> Summary of operations, production, and value . . . . .	September
<b>CROP WEATHER:</b> Weekly comments on weather and crop conditions. Rainfall data for selected stations . . . . .	First working day of week
<b>FARM LABOR:</b> Quarterly report on number of workers by type and average wage rates . . . . .	Feb., May, Aug., Nov.
<b>STATISTICS OF HAWAII AGRICULTURE:</b> A statistical summary of the State's agricultural sector . . . . .	October

To order: Any of the above reports may be obtained by contacting the Hawaii Agricultural Statistics Service, P.O. Box 22159, Honolulu, HI 96823-2159, (808) 973-9588. Most of our publications are available on the Internet at: <http://www.nass.usda.gov/hi/risetoc.htm>.

## DIRECTORY FOR INFORMATION

Additional Information relating to U.S. and World Agriculture can be obtained by contacting the following USDA economic agencies:

**National Agricultural Statistics Service (NASS):** NASS reports estimate production, stocks, inventories, disposition, utilization, and prices of agricultural commodities, and other items such as labor and farm numbers.

**Economic Research Service (ERS):** ERS situation and outlook reports and periodicals analyze the current situation and forecast market conditions. ERS monographs offer economic analysis in the areas of trade, production, rural development, farm inputs, and other topics.

**World Agricultural Board (WAOB):** WAOB issues regular forecasts of U.S. and world supply and demand prospects for major agricultural commodities.

For a free catalog that lists the products available from NASS, ERS, and WAOB call the **toll free** order desk at **1-800-999-6779**.

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Hawaii Awa Council Association  
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Hilo, HI 96720

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Hawaii Coffee Association  
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## PHOTOGRAPHY ACKNOWLEDGEMENTS

- Cover photo: Romaine lettuce fields on the Kiyotsugu Hirako farm, Waimea (Kamuela) Island of Hawaii. Courtesy of Dwight Sato, Cooperative Extension Service, University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources
- General summary: Taro fields, courtesy of the Hawaii Department of Agriculture staff, page 2.
- Fruits: Mangoes, courtesy of the Hawaii Department of Agriculture staff, page 35.
- Vegetable, Melon, and Taro: Specialty crops farmer Dean J. Okimoto, Nalo Farms, Inc., Waimanalo, Oahu, Hawaii. Courtesy of the Hawaii Department of Agriculture staff, page 46.
- Special Statistics: Vegetable farm, courtesy of the Hawaii Department of Agriculture staff, page 58.